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REQUIRED READING FOR THE CHAUTAUQUA LITERARY AND SCIENTIFIC CIRCLE.

THE BURIAL OF ROME.

BY RODOLFO LANCIANI, LL. D.

Of the University of Rome.

BEFORE the beginning of the present century, archaeological excavations in Rome amounted simply to acts of plunder; the idea of discovering an antique building and its contents for their own sake, or with the scope of leaving exposed to view a permanent subject of investigation for historians and archæologists, was absolutely unknown. They were considered as mere quarries (*petraje*) from which building materials, decorative marbles, and decorative works of art could be extracted. The annals of destruction in Rome have not yet been written; the memoir of Carlo Fea*, entitled *Istoria della rovine di Roma*, gives but a faint perception of the acts of vandalism perpetrated by the great men of the Renaissance upon the treasures of the ancient city.

The building of St. Peter's alone has caused the disappearance, more or less complete, of the monuments of the Roman Forum, and of the neighboring district, between the Quirinal, the Capitoline, and Viminal Hills; and when we consider that there is not one inch of marble or stone in the numberless modern churches, palaces, and villas, which has not been stripped off from the remains of Imperial Rome, we wonder how there should be comparatively so much left. See what I have written on this subject in chapter VI., page 157 of my "Ancient Rome."

I may simply recall to the reader that between the years 1540 and 1550 the temples of

Antoninus and Faustina,* of Julius Cæsar, of Vesta, of Castor and Pollux, of Augustus, the triumphal arches of Fabius Allobrogicus† and of Augustus, the Regia,‡ the shrine of Vortumnus,|| and many other buildings, were partially or totally destroyed by the contractors for the building of St. Peter's. In some cases the antique marbles have been differently used three or four times. Thus the tower built by Belisarius§ on the Tiber, as an outwork for the defense of the city, was constructed with beautiful blocks of alabaster found in the imperial warehouses close by. The tower was demolished under Pope Julius the Second, and the blocks of alabaster were used again to decorate the tomb of Raphael¶

*The wife of Titus Aurelius Antoninus. Her life was a profligate one, but, notwithstanding, her husband loaded her with honors. This temple named after both was built by the emperor for her.

†Same as Fabius Maximus. He received the surname Allobrogicus from a victory gained over the Allobroges in Gaul in the year 121 A. D. while he was consul. His father was the adopted son of the Fabius Maximus referred to in the "Outline History of Rome."

‡The royal castle of Numa, situated on the Sacra Via close by the temple of Vesta, used subsequently for a papal residence.

||The name is more commonly spelled Vertumnus. It belonged to an Etruscan divinity whose worship in Rome was introduced by a Vulsinian colony. He was the god of plants and watched over their progress from blossom to fruit. Budding flowers and the first produce of the garden were the offerings made him. The Vortumnalia was a festival held annually in his honor on the 23d of August.

§See "Outline History of Rome," p. 233.

¶(1483-1520.) One of the most illustrious of Italian artists. Many of his paintings in fresco adorn the Vatican,

* (1753-1834.) An Italian antiquary.

in the Pantheon.* Thus also some columns of that rare *breccia*, called *verde antico*,† were used by Queen Zenobia‡ in the building of the sulphur baths near Tivoli. Pope Nicholas V. removed them to the Vatican, and Pope Julius III. removed them from there to his own villa, outside the Porta del Popolo. Another act of brutality of which the Romans of all ages have been guilty, is the practice of making lime, and of building foundation walls with statues and other works of sculpture, sometimes signed by names famous in the history of Greek art. I say Romans of all ages, because we have instances of the wanton practice dating as far back as the empire of Septimius Severus. The propylæa (main entrance) of the Portico of Octavia were restored by that emperor with architectural marbles collected from monuments damaged, or ruined, during the fire which ravaged Rome under Commodus. The upper stories of the Coliseum were likewise restored by Severus Alexander and by Gordianus the Younger, with materials collected here and there, columns, capitals, pedestals, tombstones, and so on. One of the most interesting instances, which I quote because it is unknown to the general public, is that of the Triumphal Arch of Constantine near the Coliseum. This arch looks so neat and perfect from the outside, that no one would suspect the mystery of its origin; but let the authorities give you the permission of ascending to the hall which opens on the attic floor, by the inner staircase, and you will see a large percentage of the marble blocks, showing the inside surface inscribed with beautiful epitaphs or worked by a clever chisel. Considering that all the outside decorations of this arch were stolen from the one raised two cent-

among them, the School of Athens. The Transfiguration is generally considered his master-piece in oil painting: it also is in the Vatican.

*In general this is the name of a temple dedicated to all the gods (from the Greek word *pan*, all, and *theos*, a god); but it is commonly applied to the temple at Rome which is the most celebrated of all such structures. It was built by Agrippa, 26 B. C., and is the best preserved of the monuments of ancient Rome.

†A species of marble used in sculpture.

‡A queen of Palmyra, noted for her beauty and learning as well as for her political and martial ability. She understood the Greek, Latin, Syriac, and Egyptian languages; and is said to have marched on foot at the head of her army. She was conquered in battle by the Roman Emperor Aurelian, and was compelled to march in his triumphal procession through Rome. (See "Outline History of Rome," p. 221.)

]One of the gates of Rome.

uries before in memory of Trajan, we may safely assume that the S. P. Q. R.* did not overtax themselves or ruin the finances of the city in celebrating the victory of Constantine over Maxentius.

As far as private constructions are concerned, it seems that as soon as the foundation trenches were opened, men were sent around the district to pick up as many statues as they could secure from the ruins of ancient monuments.† The statues having been brought to the edge of the trench, the wholesale slaughter was accomplished. Small figures were hurled down entire; big ones were split into fragments. Between 1872 and the present year, more than two hundred fifty statues and busts have been found on the Esquiline alone, buried in this way. As a rule every portion of them is recovered. The "Hercules and the Horse," one of the finest groups of the new Capitoline Museum, was recalled to life out of seventy-two pieces. It happens sometimes that the torso is found in one place, and other fragments of the statue many hundred feet, I may say miles, apart. Well known is the fate of the Farnese Hercules, the torso of which was discovered in the baths of Caracalla, the head at the bottom of the well in the Trastevere, the legs at Bovillæ (le Frattocchie), ten miles from Rome. It is only fair to say that we have evidence of statues used as building materials under the Emperor Aurelian, that is to say during one of the most splendid periods of the Roman Empire.

In cutting open a new gate through the walls of the city, between the third and the fourth towers, south of the old Porta S. Lorenzo, we discovered that only the outside face of the said walls of the city was built by the Emperor Aurelian; and that the inside face belonged to an earlier building of which Aurelian had taken advantage, as it fell exactly on the line of his projected ramparts. This earlier wall—the enclosure of a garden, handsomely ornamented with a rustic kind of mosaic, made of shells, colored stones, and pieces of enamel—had rows of niches for statues; three of these niches were discovered by us in cutting the new gate in October, 1882, and in front of each one, the corresponding statue lay embedded in the nucleus of the

*See foot-note on p. 53 of "Outline History of Rome."

†I speak of course of the period dating from the first barbaric invasions.—R. L.

wall. One represents a sitting Venus, the second and the third represent fauns fighting against a giant, bright and spirited in their attitude, well chiseled, and beautifully preserved. These sculptures have been lately illustrated by Professor Eugene Petersen.*

In February 1888, a foundation wall built with fragments of statuary was discovered in the grounds of Madame Flickson Field on the Esquiline, from which more than one thousand pieces were extracted; among which twenty statues, or pieces of statues, signed by famous Greek artists from Aphrodisius.

But it is time that I should return to my principal subject, that is to say, to a brief account of what the new generation has been able to accomplish in the archaeological department, since Rome became the capital of the United Kingdom.

The first step taken in 1871 by the municipal authorities, was the institution of a special committee of eminent archaeologists, to whom the care of watching the excavations, of collecting their produce, and of exhibiting it properly in the old and new Capitoline Museums was intrusted. To give an approximate idea of the results obtained during these last seventeen years, I will mention the fact that the Archaeological Commission has already published seventeen volumes with the inventory and illustration of the objects collected, and of the discoveries made; and there is yet a large quantity of interesting material unpublished and unedited for sheer want of space and time. The National Government on its side instituted in 1876 a department for the supervision of antique monuments in Italy (*Direzione Generale delle Antichità*) to which the care of excavating the Forum, the palace of the Cæsars, the baths of Caracalla, the villa of Hadrian, the harbor of Ostia, etc., was entrusted.

The service is organized in the following way. The districts in which regular excavations or public works of any description are going on, are watched by day, and by night if necessary, by experienced and faithful guards, under the responsibility of a local inspector. The duty of the guards is to collect and secure every object or fragment of an object which comes out of the ground, no matter whether important or not. The duty of the inspector is to report to the higher authorities

what happens, and to remove the objects with care from the place of discovery to the state or to the city museums. The hour when the inspectors muster at headquarters and make their written and verbal reports of what has happened during the preceding twenty-four hours is always a very interesting and exciting one, it is—to use a national comparison—like playing the lottery, with this difference, that one is sure every day of drawing some considerable prize. The guards or overseers of excavations all come from one single and very small district in central Italy lying between the sea-port of Rimini, and the rocky hills of S. Marino. These men living in four or five villages named Savignano, Sant' Arcangelo, la Cattolica, Riccione, etc., have been engaged in the excavating business from time immemorial, and they have the instinct, as it were, of archaeological blood hounds. Illiterate as they are, they possess a wonderful perception in discovering signs that escape often more learned persons' eyes of what is lying underground, or at anyrate they can tell at a glance if a piece of ground is archaeologically promising or not. When a coin falls into their hands, they are certainly not able to read the name of the emperor, the empress, or the consul to whom it belongs, but they seem to feel whether it is a rare or an ordinary coin. Their fidelity is above suspicion.

I was once overtaken by a storm on the high lands of the Esquiline, when its transformation into a built quarter had just begun. Sheltering myself under some planks put across an open trench, I noticed one of my guards, some forty paces off, who had sought refuge under the same circumstances. He was occupied in scraping the ground with his fingers, and finally I saw him pick up an object, at which he seemed to look with admiration. He had not detected, however, my presence. The shower being over, I moved to meet the man, who handed over to me the beautiful imperial gem, or cameo, with the bust of Sabina the wife of Hadrian, the value of which has been established at about ten thousand francs.† The best testimonial I can offer to the efficiency, honesty, and energy of these men is that their number has never increased. Eight they were at the beginning of their mission, eight they are now, notwithstanding that the city has so greatly increased in size and population. Their names ought to be

* See *Bullettino della Commissione Archeologica*, January, 1889, p. 17.—R. L.

† About \$1,900.

engraved in golden letters over the main gate of the new museum.

The interest of the archæological world has been raised of late more by the scientific than by the material results of Roman excavations. I mean to say that the extraordinary increase in the number of our statues, busts, coins, and bronzes, beautiful and valuable as they are, seem almost forgotten, or cast into the shade by the light which has been thrown at the same time on the history and topography of Rome. This explains the fact that nearly every year a new standard volume is issued on the subject, which soon, however, grows old and behind the times, and a new publication is called for. I think it will please American scholars to have the names of some of these books of reference, because it is not possible to give an account of the progress made by our favorite science, in so short and concise a paper as mine.

In 1871 the Imperial Academy of Berlin published the first volume of the *Corpus Inscriptionum Latinarum*: Latin inscriptions collected from the entire Roman world, comprising only those dating from the republican period. A few years later, Raffæle Garrucci published a new volume with the latest discoveries on pre-Augustean epigraphy. Both volumes are now antiquated, and the Berlin Academy is contemplating the publication of a new one. The same thing may be said as regards the sixth volume of the *Corpus* issued in 1876, and containing 3,925 inscriptions of the Imperial Era. Since that time I have myself discovered and published more than one thousand inscriptions. An equal number has been edited by others. To keep students *au courant** of fresh epigraphic finds, a permanent appendix to the *Corpus* has been instituted under the name of *Ephemeris Epigraphica*. (Berlin: Reimer.) The remedy, however, is not thoroughly efficient. As regards the topography of Rome, I can safely assert that a book published this year would be sadly lacking in information after the lapse of a few months. I do not exclude from this criticism the *Topographie der Stadt Rom in Allertum* by Heinrich Jordan (1871-1885), Middleton's "Ancient Rome in 1885" (and 1889), and the contemporary volumes of Burns, Reber, Ulrich, etc. The latest publication is the *Topographie Der Stadt Rom*, published at Nördlingen by Otto Richter in

1889, but if things go on in Rome as fast as during the last few years, it will soon share the fate of its predecessors.

My advice to young students is this. Build the foundations of your knowledge on first-class books, no matter how antiquated they may appear. I include in the list, besides these already mentioned, Bunsen's *Beschreibung der Stadt Rom*; Canina's *Edifici di Roma antica*; Nibby's *Roma nel 1837*; Becker's *Topographie*; Ulrich's *Codex topographicus*, etc. Then follow the times and keep informed on latest discoveries by consulting four or five leading archæological periodicals, especially, and above all, the *Bullettino della Commissione archæologica comunale di Roma*, issued on the first day of each month.

I will bring this paper to a close by mentioning some of the many finds which have taken place in Rome and its neighborhood since the beginning of the present year, of which no account has been given, except by one or two of the periodicals I have just mentioned.*

Let us begin with the forum of Augustus which more than a forum was a museum of statuary, and a gallery of pictures, and the archives for the written history of Rome. Its enclosure wall was ornamented with busts or portrait statues of the leading Roman generals who had actually increased the boundaries of the empire by their military exploits. On the pedestals supporting the statues and busts, the records of these exploits had been engraved—concise biographies dictated by Augustus himself. Of this forum only a small portion was known, the picturesque ruin called *Arco de' Pantani* (engraved on page 84 of my "Ancient Rome"). The municipal authorities, acting on my suggestion, have bought a considerable portion of the area, and have excavated some of it to the ancient level. Although the work is only begun, still many first-rate documents have already been found. A pedestal which once supported a vase of pure gold weighing a hundred pounds, offered to Augustus by the inhabitants of Spain; a pedestal revealing for the first time who the Emperor Nigrinianus was; short biographies of Fabius Maximus,

* Besides the *Bullettino*, see the *Notizie degli scavi* edited by Giuseppe Florelli, senator of the kingdom and chief of the department of antiquities; the *Mittheilungen* of the German institute of archaeology; the *Bullettino di archæologia Cristiana*, edited by de Rossi; and the *Ephemeris Epigraphica*.—R. L.

* To the present time; constantly advised.

Sulla the Dictator, of Appius Claudius, Cæcus, engraved on marble plinths; two unknown marble statues; two fluted columns of *giallo antico*, and beautiful architectural fragments of the Temple of *Mars Ultor*, which stood in the very center of the Forum.

On the Esquiline Hill, in opening a new street called the *Via dello Statuto*, the remains of two patrician houses have come to light, the first belonging to Lucius Mummius Faustinus, a magistrate of the time of Septimius Severus, the second to Flavius Lollianus, who was prefect of the city in the year 355 of the Christian era. Both houses were handsomely decorated with frescoes, mosaic pavements, columns, sculpture of various kinds, and pedestals on which the names of the owners were engraved.

In the plain of the Campus Martius in cutting the avenue which leads to the new bridge Garibaldi, an ancient square (*compitum*) made by the junction of four streets, has been found. In the center of the square stands a marble altar dedicated to the gods, protectors of the adjoining quarter. The name of the ancient *carrefour* was *Vicus Æsculeti*. The bas-reliefs which ornament the four sides of the altar are of exquisite workmanship.

In the course of some restorations made to the modern façade of the capitol, it has been found that when Michael Angelo* and his pupils changed the architectural lines of the palace, they did not destroy the mediæval one but satisfied themselves by concealing it without touching or injuring a single stone. We are indebted to the precaution of the great master, for the privilege of looking again at the mediæval capitol as it were through the veil of the modern changes. The old façade must have looked like the Bargello† in Florence, and it is studded with coats of arms and with mottoes of mediæval knights and magistrates, and with paintings of the Renaissance, among which is a Madonna and Child in the style of Giotto.‡

From the bed of the fruitful Tiber the

dredges have brought to the surface the following monuments: a fragment of the triumphal annals which were engraved on the walls of the Regia in the Forum. The new fragment belongs to the years 576-579 of Rome, and mentions the triumph of Gracchus over the Spaniards, the one of Albinus over the Lusitanians, the one of Claudius over the Istrian and the Ligurians, another of Gracchus over the Sardinians, and a fifth of Titinius over the Spaniards. The second fragment records the institution of a special committee to watch over the embankments and the navigation of the river, made by Tiberius in the year 15 B. C. The committee was composed of five senators, under the presidency of an ex-consul. The chairman mentioned by this new document is Lucius Caninius Gallus, who had been consul seventeen years before.

About one mile outside the Porta del Popolo, on the right hand side of the Via Flaminia, the famous basilica of St. Valentine has been unearthed, together with the adjoining cemetery, dating from the fifth century of our era. More than three hundred inscriptions engraved on tombstones and sarcophagi have been brought to light, together with rare specimens of Byzantine jewelry in enameled gold. One of the tombstones deserves a special notice. It is a marble slab removed or stolen from the temple of the Dea Dia,* at the fifth milestone of the Via Campana, inscribed with the *compte rendu*† of the sittings held by a religious association (*Collegium Fratrum Arvalium*) on January 11 of the 21st year after Christ, and on May 27 of the following year.

The most important find of the season is perhaps the one made at Ostia, the Gravesend‡ of ancient Rome. East of the Forum, and a few steps from the quay, or embankment, of the river, the barracks of the police have been discovered, a brick building 150 x 250 ft., capable of containing four companies (*centurie*), that is to say, a body of six hundred men.

* A goddess to whom the *Fratres Arvales* (a brotherhood imported into Rome from Alba) sacrificed. It was their duty to offer sacrifices on various days and months of the year to a goddess called Dea Dia, to implore the blessings of heaven on the produce of the soil.

† Report.

‡ A town of England on the right bank of the Thames, twenty miles south-east of London. It is the limit of the port of London, just as in ancient times Ostia, at the mouth of the Tiber, was the port of Rome. But the deposition of the river filled up the port, and Ostia is now three miles inland.

* (1474-1564.) An eminent Italian painter, sculptor, and architect. His work decorates the ceiling of the Sistine Chapel in the Vatican, the master-piece being *The Last Judgment*. He was the architect of St. Peter's Church to which he devoted his life, but did not live to see it finished.

† One of the two most notable palaces of Florence, the other being the Palazzo Vecchio.

‡ (1276-1336.) A noted Florentine artist.

The building, besides a large court for drilling, officer's lodgings, dormitories, prisons, etc., contains an *Augusteum*, or temple, dedicated to deified emperors and empresses. Here sixteen marble altars were found, inscribed with historical records and with the

praises of Hadrian, Lucius Verus, Ælius Cæsar, Marcus Aurelius, Septimius Severus, and others. The excavations, suspended at the beginning of the hot and malarious season, will be resumed in October, and will prove, I am sure, as successful as of the past years.

(The end.)

THE POLITICS WHICH MADE AND UNMADE ROME.

BY C. K. ADAMS, LL. D.

President of Cornell University.

SECOND PAPER.

EARLY POLITICAL MODIFICATIONS.

SCARCELY had the early Roman constitution assumed definite form when signs of discontent began to be evident. The sources of dissatisfaction were chiefly three in number. These were, first, the irresponsible power of the kings; second, the exclusive legislative authority of the nobility; and third, the non-citizenship of the plebeians. Let us briefly consider these in their order.

The power given to the early kings was greater than human nature could bear. Though all authority emanated theoretically from the body of citizens, yet it was still true that when once the kingship had been conferred, it could not, under the constitution, be either limited or taken away. The king could not be formally impeached; and, as his office was for life, he could not be held accountable to public opinion. The temptation to exercise undue authority was irresistible. Revolution was inevitable. In the reign of Tarquin the Proud the people not only overthrew the king, but expelled from the state every member of his clan. The intolerable nature of the abuses that had come to prevail is indicated by the simple fact that every citizen was required to take solemn oath never to tolerate kingship again.

The substitute adopted for the kingship was a singular political device, which, so far as we know, is unique in the history of political forms. Two colleagues (*consules*) were appointed, each having kingly authority, and each ruling for one year only. These consuls, for such they were generally called, were entitled to exercise substantially the same functions as those exercised by the kings. But upon the exercise of this author-

ity there were two important checks. In the first place one consul was a check upon the other. When they could not agree, nothing was done. Commonly one consul exercised authority outside of the city, and the other inside, but this arrangement was not obligatory, nor was it universal. At times, the embarrassment arising from conflicting authority was very considerable. The saving element in the arrangement was the fact that it prevented over-legislation and over-action. It seems to have had an influence akin to that of the bi-cameral system in our legislatures. This double executive system continued for about five hundred years; and in view of this historical fact, we may well hesitate to assert that its disadvantages were greater and more numerous than its advantages. It must be remembered that the consul's duties were largely legislative, as well as executive. In the second place, the consuls could be held accountable for their acts, whereas the kings could not. At the end of their term of office the consuls could be put on trial for the abuse of their power.

It ought also perhaps to be noted that in one other respect the power of the consuls was less than the power of the kings. The kings had the right of appointing the priests; the consuls had not. Vacancies in the college of priests were henceforth filled by the priests themselves. One of the results of the revolution, therefore, was the separation of the religious from the civil authority of the state.

The second great change in the constitution was in the position of the nobility. As we have already seen, all authority in the early history of the state was in the hands of the patricians. None but members of this class were admitted to the senate or to the

comitia curiata. Moreover, there was no way by which the class could be recruited by the ingress of new members from without. To use a figure once used in the English parliament, the only door of admission led through the tomb of a dead ancestor. The consequence was that as the state increased its territory and population, the relative number of the patricians became less and less. But this was not all. According to the early constitution the patrician class not only enjoyed all the political privileges, but also carried all the political burdens. They alone were admitted to the army; they alone in theory at least paid all the taxes. But this was an arrangement which, logical as it was, could not continue. As the state grew, its battles could not be fought, its revenues could not be kept up without help from the plebeians. What is known as the Servian constitution was the result of this necessity.

The nature of the change wrought by the Servian constitution is deserving of the most careful attention, for we now see the admission of a new principle into Roman politics. A new classification of all the male inhabitants within the city was made, and in this classification an ingenious method was adopted by which at once all the people had a voice in the control of affairs, and at the same time the predominant influence was left in the hands of the rich.

The plan, briefly described, was this: The very richest men in the state made up the cavalry and were known as knights. The others were divided into five classes, the classification being made on the basis of wealth. Each class was again subdivided, each subdivision forming the military and political unit of the new organization. The number of these units or centuries,* as they were called, was a hundred ninety-three.

Now observe the significance of this enumeration. The knights were formed into eighteen centuries. The first class, that is to

say, the class next to the knights in wealth, contained eighty centuries. Adding these together, we see that the men of wealth counted as ninety-eight centuries, whereas all the other four classes together counted as only ninety-five. Thus we see that while all classes were included, the men of wealth had a clear majority. All questions submitted were voted upon by centuries, hence it was always possible for the men who bore the principal burden of taxation to decide the questions submitted. This influence of property was a permanent factor in the future history of Roman legislation. The new organization was known as the *comitia centuriata*, and by us may be conveniently called the centuriate assembly.

At the first the Servian classification was purely military in its purpose. But it soon came to have a political influence of the greatest importance. The change came about in a very natural way. As the classes contained plebeians as well as patricians, it was found convenient to hold the meetings outside of the city walls. From the first it was held to be reasonable that the men who fought the battles should determine all questions of war and peace. When, therefore, it was found necessary to enlarge the army by including in it others than members of the old patrician families, it was but logical that the legislative body should be correspondingly enlarged. The principle of representation in the modern sense of the term was not a part of the Roman system. From military affairs it was easy for the new assembly to pass to civil affairs. Gradually it extended its functions, and before very long it superseded the old *comitia curiata* altogether. But it never gained the privilege of discussion. It simply had the right to vote on questions submitted to it. The first classes were always first called upon for their vote, and thus questions were generally decided before the voting reached the inferior orders.

A change somewhat analogous to this, also took place in the senate. Though theoretically this august body continued to be composed exclusively of patricians, still a number of non-patricians were added to the senate-roll. These were denominated *conscripti*, or conscripts. But they were not placed on a footing of equality with the patrician members, nor do they appear to have had the right to speak. By the proud patricians they were contemptuously denominated *pedarii*, men

*The century, at the time the word was adopted, probably included a hundred men; but under the Servian constitution it seems to have had only a conventional significance. We are led to this belief by the fact that the first class, which was made up of the largest land-owners, was divided into eighty centuries, whereas the fifth class, which was made up of the non-freeholders contained only five centuries. It is impossible to believe that the richest class was sixteen times as numerous as the non-freeholders. We are forced, therefore, to believe that under the Servian constitution, the word century did not even at the first mean strictly a hundred. It must have meant simply the military and political unit.—C. K. A.

who voted with their feet. But the fact of their having a vote gave them considerable influence. That they were admitted at all reveals the irresistible power of the plebeian element of society.

The powers of the senate were somewhat enlarged by the new constitution. In addition to its old right of confirming or rejecting resolutions adopted by the popular assembly, it could now accept or reject the magistrates elected by the same body. Its right of veto was absolute, and this right was often exercised. The senate thus became the real governing power of the state; and this it continued to be for nearly five hundred years.

From what has been said, it will be seen that the real nature of the Roman government in all its essential characteristics is revealed by the organization and powers of the senate and the centuriate assembly. At a little later period another assembly came into existence, but, as we shall hereafter see, this new assembly served to protect one of the classes, rather than to change the fundamental character of the government. It is quite correct then to regard the Servian constitution as having fixed the essential nature of the government for the whole of what is called the republican period. It was to the form of government provided by that constitution and by the revolution that immediately followed, that the development of Roman power and greatness was chiefly due.

The third element in the great revolution was the establishment of the tribal assembly and the tribunate of the *plebs*.

It was only fifteen years after the expulsion of the kings when the *plebs* decided to throw themselves into revolt against the existing order of affairs. In the year 494 B.C. they withdrew in a body to the Sacred Mount and elected two persons whom they charged with the duty of protecting them against the injustice of their oppressors. These new officials were authorized to interfere with the execution of any law or order that threatened the interest of any individual plebeian. They could not veto any legislative act as a whole, but were limited to securing exemption from the operation of the law upon individual persons. The extraordinary nature of these powers reveals to us the fact that the political discontents were of the most serious and alarming nature. Otherwise the enactment would not have been permitted, or if permitted, the functions of the newly appointed officers could not have been

performed. But the enactment, as finally sanctioned by the senate, went so far as to make permanent provisions for the appointment of such officials. From the judgment of the tribunes there was to be an appeal to the plebeian assembly, just as there was an appeal from the judgment of the consuls to the assembly of the centuries.

Here, then, was a setting up of a government within a government, each holding analogous powers, one of them having authority over a certain class of the people, the other holding at least theoretical authority over the whole. The existence of such a system affords extraordinary evidence of the capacity of the Roman people to exercise the privileges of unusual political authority with moderation and wisdom.

The tribunes of the *plebs* not only came to be regularly appointed, but their powers came to be considerably enlarged. Their duties were soon so numerous that the number of tribunes was increased, first to five, and afterward to ten. It was soon found to be a waste of effort to pass measures in the senate which were liable to be vetoed by the plebeian tribunes; and, therefore, it was thought best that the opinions of the tribunes should be ascertained in advance. To this end, the tribunes were admitted to the senate. Practically, therefore, the ten tribunes when elected, were elected to the senate as well as to the tribunate. In this way the masses of the plebeians had direct and authoritative representation in the most important of the legislative bodies.

Another feature of this movement was the establishment of the whole body of the plebeians into a species of legislative assembly. As we have seen, the *plebs* not only appointed tribunes with extraordinary powers, but also established the privilege of appeal from the orders of the tribunes back to themselves as a body. It was necessary, therefore, that the appointing body should have permanent organization. At first the voting had been by *curiæ*, as in the older assembly. But soon the voting came to be by tribes, the basis being the four tribes into which Servius had divided the city. A little later, seventeen further divisions were added from the territory added to the city, and thus the number of the tribes became twenty-one. The new assembly was known as the assembly of the tribes.

The authority of this new assembly soon came to be greatly enlarged. By the Icilian

law* of 492 B. C. the right of the tribunes to hold assemblies of the people was especially guaranteed. It was by the Publilian law† of 471, that the *comitia tributa* was regularly established. In the reorganization, by which the votes were cast by tribes, one peculiarity is worthy of note. The new assembly was composed exclusively of freeholders. Thus not only the patricians, but also a vast majority of the freedmen and clients were excluded. From this we see that the *comitia tributa* was an assembly of the independent middle class. But notwithstanding this fact, the resolutions of the assembly of the tribes, if approved by the senate, were as binding on the whole people as the resolutions of the assembly of the centuries. The two assemblies had co-ordinate and co-equal authority; but both of them, for the validity of their laws, required the sanction of the senate.

From these characteristics we are forced to conclude that the Roman government was strongly aristocratic and conservative in its character. What may be called the masses of the people never once got the control of affairs during the whole of the republican period of about five hundred years. They were never, however, without a powerful influence.

The Roman political constitution, as thus outlined, remained substantially the same in all its fundamental characteristics till the fall of the republic. The essential characteristics

*This law took its name from Icilius, one of the three envoys sent by the plebeians after their revolt and withdrawal to the Sacred Mount, to treat with the patricians in the senate.

†So called from Publius Volero, one of the tribunes who made the motion for the law. (See "Outline History of Rome," p. 68.)

of this remarkable constitution may be summed up thus:

1. An executive officer of large powers. His powers, however, were at once under constant check by his colleague during his administration, and subject to review when the administration came to a close.

2. A senate made up of representatives of the oldest and most influential families. The position of senator was held for life; and to the senate all executive officers of high grade were admitted at the end of their term of office. Although non-patricians were enrolled and had a right to vote, their power and influence continued to be of a subordinate nature. The senate theoretically was in constant session and was really the great regulating and controlling power of the state.

3. To the popular assembly all classes were admitted; but the classification was such, and the votes were counted in such a manner, as to give predominant influence to citizens of wealth. The poor were not excluded from power, but their power was carefully limited.

4. The tribal assembly with the tribunes as executive officers furnished a constant means of expression to the middle classes.

5. All parts of the government were pervaded by a system of checks which made difficult any undue exercise of authority.

6. And, finally, it may be added that the higher officers were chosen by such methods as almost invariably to bring the men of foremost character and ability into power.

We shall hereafter have to see how these constitutional peculiarities and methods were applied in the development of the Roman political system.

HIDDEN JOYS.

PLEASURES lie thickest where no pleasures seem:

There's not a leaf that falls upon the ground
But holds some joy, of silence or of sound,
Some sprite begotten of a summer dream;
The very meanest things are made supreme
With innate ecstasy. No grain of sand
But moves a bright and million-peopled land,
And hath its Edens and its Eves, I deem.
For Love, though blind himself, a curious eye
Hath lent me, to behold the heart of things,
And touched mine ear with power. Thus far or nigh,
Minute or mighty, fixed or free with wings,
Delight from many a nameless covert sly
Peeps sparkling, and in tones familiar sings.

—Laman Blanchard.

THE LIFE OF THE ROMANS.

BY PRINCIPAL JAMES DONALDSON, LL. D.

Of the University of St. Andrews, Scotland.

PART II.

AN examination into the history of the component elements of the family was proposed at the end of the last chapter. We commence with the wife. Accurate information in regard to early Roman marriages does not exist. There is no early literature to throw light on the subject. We have merely tradition, which coming down through centuries found record only at a late period. But we can gather this much with some probability that at the earliest period the services of women who had been trained in household and agricultural work were valuable and that therefore the husband had to pay for his wife. Instead of getting anything with her, he gave the father a price to induce him to part with his daughter. She then passed from the family of her father into that of her husband. If her husband was the head of the family, then she entered into a legal relation with him the same as that of a daughter. If the husband's father happened to be alive, then she and her husband were equally under the despotic government of the head of the house.

While this purchase of wives continued and when probably after this stage the husband paid nothing for his wife, but received nothing with her, the wife was under the complete control of the father of the family, who was most usually her husband. He had power of life and of death over her. He might do as he liked; she had no right to interfere. He might be licentious and cruel; her only course was to submit and bear with him patiently. She could find help only in one quarter. In all matters that related to unions between two families, a council was formed consisting of the principal members of each, and she could appeal to this council. But the sentiment of this council was all in favor of the wife's submission to her husband, in all circumstances. Yet this possibility of reference had no doubt a mollifying effect and in addition to this there was the considerate character of the Romans; though rough and rude they knew how to make allowances for human nature and they had great self-respect which extended its sphere to everything re-

lated to themselves. And thus they respected their wives, these were Romans like themselves.

The Roman wife was not relegated like the Greek wife to a separate room. She dined with her husband and with his friends. She walked out with her handmaidens, veiled indeed, but the veil covered only part of the face and did not prevent her from seeing or being seen. She shared her husband's counsels. They both acted as instructors to their children. She had rule over her women slaves. Indeed, take it all in all, her lot must have been tolerably happy. She did plenty of work; so did her husband. But her work was not menial; she employed her slaves for all those services which were deemed unworthy of a Roman wife; and in course of time the power of the husband was lessened. He could not kill his wife under all circumstances nor could he sell her.

With the advance of conquest came an influx of wealth and with this influx the condition of women completely changed. Fathers no longer received payment for their daughters or left their maintenance to the husband, but settled a sum on each, which would be sufficient to keep her comfortable for life. No free woman now married without a dowry. The dowry was given to the husband, not that it might become part of his property, but that he might have the use of it, so long as the marriage subsisted. If he dismissed his wife without good reason, he had to pay back the dowry.

The wife in these circumstances did not go into the family of her husband unless by an additional legal form he adopted her as his daughter. She remained in the family of her father and was under his control. Marriage thus came to be a contract, arranged by the parents, but with the consent of the marrying couple. This consent did not always count for much; for the girl often married when she was not more than fourteen years old. But still it now became a principle of Roman law that there could be no marriage without consent. Being a contract it could also be dissolved by the desire of either party. No rea-

son had to be assigned. In earlier days a dissolution of marriage was not possible. The wife had no rights as against the husband and could not divorce him; and the husband could punish her for any act of disobedience and could put her to death for unfaithfulness.

Divorces came into vogue in the third century B. C. Some have represented this as a degradation of morals, but it really implied a growing respect for the feelings and rights of women. When marriages became mere contracts, divorces increased in number. But a very exaggerated idea of the prevalence of these is generally found in books on Roman manners.

During the civil wars of Cæsar and Augustus an intense dislike to marriage seized hold of the upper classes. They preferred court-essans to wives. They did not wish to marry poor women, because that would narrow their power to indulge in luxury, and they did not care to marry rich women, because, as the wealth remained under the control of the women, they were humiliated by having to humor them in order to obtain the enjoyment of their riches. It is from men that shared these sentiments that our accounts of the prevalence of divorce have come down to us.

They mention one or two cases where women had many husbands in a short period of years, but there cannot be a doubt that these cases were very exceptional. Generally wives were strongly attached to their husbands, as the statement of Velleius* proves, and their attachment was partly due to the circumstance that they were not bound by an indissoluble legal bond, but were left to the impulses of their hearts. It is characteristic of the Romans that they did not permit actions for breach of promise. The betrothal was an important and solemn ceremony with the Romans, but they considered that it was not wise to compel people to marry when there was not a full and unfettered love of each other at the time.

There was not the same development of freedom in regard to the sons. The father to the last days of the republic held sway over the

son. The son might occupy a high position and and be a distinguished man, but if his father were alive, he was not entirely independent. And this condition of affairs was all the more galling that the state and the parents looked to the males as the support of the commonwealth. Every father had the right to destroy his children, to refuse to take them up, as the phrase was, and to separate them entirely from himself. In the exercise of this right many daughters were exposed to become the prey of wild beasts or ravenous birds or to be picked up by the wayfarer who generally devoted them to prostitution. There thus arose a scarcity of women. And it is likely that every free-born woman in the first five centuries of Rome was married at an early age. But the father rarely exposed his sons. He regarded them as likely to be a help to the state and a prop to his own old age. In fact he failed to discharge his duty, if he did not produce male offspring. He was bound to marry. At the census every Roman was asked if he had married that he might have children, and the censor could impose a penalty on any one who neglected this duty. Special care therefore was taken of the boy.

Both boys and girls received their names at a gathering of friends, convened the eighth day after birth when the child was a girl and on the ninth when the child was a boy. During his infancy and boyhood the lad wore suspended by a chain round the neck a *bullæ*, or little case, generally made of gold, rarely of silver, when the parents were rich, and of leather when they were poor. This *bullæ* contained an amulet in it or attached to it and indications of his parentage. He also wore a white robe variegated with a red band from top to bottom.

Sometime between the ages of fourteen and sixteen years he put aside the *bullæ* and the pretty robe and assumed a simple robe all white, the manly gown, as it was called. This crisis in the boy's life was celebrated with much festivity. His friends held a feast and they marched in procession to the capitol, offered up vows and prayers and sacrifices to the gods, and introduced him to the members of his family and clan. This was in all probability the occasion on which his father certified the boy's paternity and claimed for him all the rights and privileges of a Roman citizen. He then entered on his military training and after that he strove to be elected to the various offices of state which lay open to

* (About 19 B. C.—31 A. D.) The author of a work professing to give a view of universal history, but devoting special attention to Roman affairs included between the Trojan war and the year 30 A. D. He was also a distinguished soldier; he accompanied Cæsar in his Eastern expedition and served under Tiberius in Germany, as præfect or legatus. (See allusion to him on p. 8 in the October number of THE CHAUTAQUAN.)

him at different ages. As we have seen, he did not engage in any trade. He might be a merchant on a grand scale. But it would be more to his mind to amass wealth by pillaging provincials and to spend the leisure hours of his life in the senate at Rome or on his landed estates in the country.

Many stories are told of the sternness of fathers to sons who were grown up. Some of these are doubtless fictitious, but they reveal the Roman sentiment. Thus it is related that Brutus (consul in 509 B. C.), who delivered Rome from the tyranny of Tarquinius Superbus, ordered his two sons to be scourged, to be bound to a stake, and to be beheaded because they conspired to restore the monarchy. There are different versions of the death of Spurius Cassius who introduced an agrarian law* (486 B. C.), and according to some was the first to do this. One version makes his father summon a council of friends in his own house, try and condemn his son for having aspired to regal power, and order him in consequence to be scourged and put to death. Historians relate that Titus Manlius Torquatus,† when consul for the third time in 340 B. C., ordered his son to be executed because he disobeyed a command of the consuls not to engage in single combat with any one of the enemy.

The historical evidence for these three instances is not satisfactory, but similar stories are told of the strictly historical period. D. Silanus, a son of another T. Manlius Torquatus, was accused by his province, Macedonia, in 140 B. C., of having accepted bribes. The father asked permission of the senate to try his own son alone without any council of friends, and finding him guilty he ordered

him to quit his presence forever. The son, stung with shame and agony, hanged himself the next night. And even in the time of Cicero, A. Fulvius commanded his son to be put to death for joining the Catilinarian conspiracy.

We cannot but believe that grown-up sons often resented the exercise of this arbitrary power, and that this resentment and unwillingness to submit to the paternal yoke explains the statement of Villeius that no son remained faithful to a proscribed father. At the same time Roman history supplies us with many instances of strong affection of father to son and of son to father. And among other proofs of this fact appeal can be made to the long continuance of the custom of sons living with their fathers after they had married and had in our sense of the term, families of their own. Thus Cato, the censor, shared his little house with his married son. The father of Marcus Crassus was censor and obtained a triumph, but he lived in a small house in which Marcus was reared, and in the same house were the two married brothers of Marcus, and they all dined at the same table. And Plutarch* and Valerius Maximus† mention in connection with the history of Æmilius Paulus‡ that sixteen of the Ælian gens, or clan, occupied one small house and lived on the productions of one farm, and they dwelt together in that house with their children and wives, among whom was the daughter of Æmilius who was twice consul and twice triumphed. This instance is adduced in proof of the economical and simple habits even of very noble Romans, but it also proves that they could live happily together.

The daily life of these noble Romans was, as we have seen, very simple in the earliest times. But when luxury set in, simplicity vanished. At first they lived mainly on the vegetables grown in their own gardens, but in the second and first centuries before Christ a Roman's table was furnished with rare and costly dainties from every part of the world. The hours of the meals were also

*The *Ager Romanus*, or Roman territory (*ager* meaning a field), was in the earliest times divided among the people; later the kings usurped the power of distributing it, and the patricians claimed the right of occupation. This led to dissatisfaction among the plebeians and they began to clamor for a share. When Spurius Cassius was consul he proposed an agrarian law for the purpose of dividing among the poorer citizens a part of the property of the state, and exacting of them for it a legal rent. For this he was accused in the following year by the patricians of aiming at regal power, and was condemned to death.

†He had himself won immortal glory by slaying in single combat a gigantic Gaul, taking from his body a gold chain, *torques* (whence his surname), which he put on his own neck. Shortly before a battle between the Romans and the Latins, the consuls forbade on punishment of death any single combats. The son of Manlius, provoked by the insults of a noble among the enemy, accepted a challenge made by the latter, slew him, and was put to death by command of his father.

*The greatest Greek biographer of antiquity. He lived probably during the latter part of the first and the beginning of the second century A. D. His leading work is his "Parallel Lives," in which the biographies of eminent Greeks and Romans are written in pairs and followed by close comparisons between the two men.

†The compiler of a large collection of historical anecdotes. He lived in the reign of Tiberius, but almost nothing is known of his personal history.

‡(About 230-160 B. C.) A Roman consul.

altered. Generally doctors approved of taking only two meals in the day; breakfast about ten or eleven o'clock and a dinner at three o'clock or later. But often people took a slight refreshment about eight or nine o'clock, a heavier meal at twelve, and the great meal of the day, the dinner, some time between three and four. And on rare occasions there followed a fourth meal as the evening wore on. The hours of meals, however, varied, and some took their dinner at a late hour of the day.

There were usually three courses, at least in later times, the first consisting of eggs, some vegetables that they supposed to be suitable for whetting the appetite, and small fishes—then the dinner proper, and then the dessert. The Roman bill of fare was most extensive. They used all the kinds of vegetables which grew in their own country. Every kind of four-footed beast was cooked up, especially boars and hares. They ate and reckoned as dainties animals which most of us would not like to dine on, such as dormice. And in the picture of a pantry which was found on a Pompeian wall among other things awaiting the palate of the master of the house, there is an animal which has a most striking resemblance to a rat. Among the birds the favorites were the pheasant, the Guinea hen, the thrush, the beccafico,* the woodcock, the turtle-dove, and even the flamingo. Sometimes rich men would place on the table a peacock in full feather—but the men who did so were reckoned to have more money than taste or wit. Among the fishes were the char, the turbot, the mullet, and some people used the sturgeon on account of its size and price, though the taste of it was not among the most delicate. All kinds of shell-fish were also eaten. And for dessert they had an endless variety of sweetmeats, cakes, and tarts.

Let us trace the progress of a Roman dinner. The guests invited take off their shoes on coming into the house and put on light sandals or slippers, and are then led to the dining-room. This dining-room was generally small, neatly painted and neatly furnished. The furniture consisted mainly of three couches, two of them at right angles to

the third, and leaving one side of the square open. The guests reclined on these couches, three on each, arranging themselves according to rules of etiquette which seem to have been generally strictly observed. It was rare that numerous guests were invited—for they held to the rule of Varro,* that a dinner party should never consist of less than three, the number of the Graces,† nor more than nine, the number of the Muses.‡ The guests then place around their heads garlands of parsley or myrtle which they take down from the walls of the room. They also admire the profusion of roses and rose leaves which are scattered over the room for the sake of their fragrance. They now make ready for the dinner. They unfold the napkins which they have brought with them, or with which, perhaps, the host is generous enough to supply them. They will be very useful, as no fork is ever used except in kitchen work, and there is not much employment of the knife or of the spoon. The meat had already been carved for them, for every rich family had a slave whose special business was to carve. In very magnificent feasts these slaves sometimes carved to the sound of music, and the attendants would bring in the tables with the dishes on them, dancing and keeping time with the notes of the flute. The guests in eating use their hands much more frequently than is now the custom, wiping them on their napkins and having water to wash them whenever they might deem it convenient. At the commencement of the dinner the guests invoked the gods, and now when the principal part of it is over, a few moments are devoted to silence while an offering is made to the Lares.||

The feast was accompanied with wine—

* (116-28 B. C.) A celebrated author whose wide knowledge earned for him the title of the "most learned of the Romans." He held high command in the army under Pompey, and fought against Cæsar in the Civil War. (See reference in "Latin Courses in English.")

† They were goddesses presiding over all social enjoyments and elegant arts. Their names were Euphrosyne (a Greek word meaning cheerfulness), Aglaia (splendor, or brightness), and Thalia (bloom, or wealth).

‡ They were the daughters of Jupiter and Mnemosyne (memory). Calliope was the muse of epic poetry; Clio of history; Erato of lyric poetry; Melpomene of tragedy; Terpsichore of choral dance and song; Erato of love poetry; Polyhymnia of sacred poetry; Urania of astronomy; and Thalia of comedy.

|| See note in October issue of this magazine, p. 89.

* (Bek-ka-fe'ko.) The Italian fig-pecker, a singing bird of the order *Sylviadae* (warblers), found chiefly in Southern Europe. It is still eaten with delight by Italians, Greeks, and French; and an annual feast in which it forms the principal dish is called *beccaficata*.

drinking, which continued after the substantial food had been taken. A little of the wine is poured out as a libation to the gods, and following a Greek custom the Romans of the later republic and empire appointed one of their number to be ruler of the drinking. They generally determined by a cast of the

dice, which of the feasters was to exercise this power, and when once elected, every one had to obey his commands. No amusement could be introduced without his consent; he ordered the drink just as he liked, and all looked up to him for decision on any disputed point.

THE STORY OF SEJANUS.

According to Ben Jonson.

BY GEORGE PARSONS LATHROP.

THE Emperor Tiberius (A. D. 14 to 37), who, beginning his reign wisely, ended it in a terrible isolation of suspicious fear, frightful bloodshed, and (as some aver, though it has been much disputed) hideous debauchery, was a stern and austere man, unamiable, yet in many things judicious and even generous. But, surrounded as he was by the complexities of government over a vast empire, by conflicts of interest and numerous jealousies, ambitions, and political intrigues that worked into a tangled web around him, threatening his power and even his life, his finer traits were clouded, and he grew constantly more wary, hypocritical, and distrustful. Although when he came to power he was fifty-five years old, he perhaps never had put entire faith but in one man. That man was Ælius Sejanus, who was only a knight, born in Etruscan Vulsinium and the son of that Seius Strabo who, near the end of Augustus' reign, commanded the Prætorian Guard.* One reason for his raising such a man, of comparatively low station, to high place and authority, may have been to humble a powerful and dangerous aristocracy, by putting them below him. As prætorian prefect, Sejanus early gained the whole confidence of Cæsar, i. e., Tiberius, by extreme devotion, "indefatigable activity and wise counsels," as historians have borne witness. Bad men—and even men who set out with no clear intention of being bad and perfidious—often gain influence in this way, by real merit of service, and afterward treacherously abuse it. I am bound to say that Ben Jonson,† in his dramatic presentation of

Sejanus, gives him no credit for any good trait or duty well performed. The story of Sejanus, according to him, is simply that of a monster of greed and disloyalty, coming into conflict with a monster of unredeemed tyranny, craft, and murder, who is Tiberius. We will follow this story in the main, but with some modification.

Arruntius, a noble Roman who was allowed to air his discontent unharmed, in order that Tiberius might point to him as an example of free speech, attributed to the basest means the advancement of Sejanus, whom he remembered as once "a mere serving-boy." Titius Sabinus, another eminent man, agreed with him and wrathfully contrasted Sejanus' early degradation with his later power, which made him "the partner of the empire," having his image reared equal with that of Tiberius and borne on ensigns. The statues of Sejanus did indeed receive divine honors, like Cæsar's; and he is said to have sacrificed to his own divinity. But it must be explained that the Roman idea of giving homage to the divinity of a hero or powerful person was not strictly the worship of a mortal. It was an attempt to recognize, revere, and propitiate that divine element in him which was supposed to have a virtue in itself, apart from his physical being. Still, such worship was apt to be debased into mere flattery of the man himself. Arruntius and Sabinus, and Caius Silius—a general who had done much for the empire by quelling the revolt of Sacrovir in Gaul—resented the worship given to the image of Sejanus, holding him unworthy of the power bestowed on him, by which, Sabinus said, "He commands, dis-

* See "Outline History of Greece." p. 187.

† (1574-1637.) An English dramatist. At the age of twenty he went upon the stage, but not meeting with success there, he left it and began writing plays, and in

this achieved great popularity. It is said that in the tragedy "Sejanus," Shakspeare took his farewell of the stage as an actor.

poses every dignity;—centurions, tribunes, heads of provinces; prætors and consuls." And, speaking of the fortified camp in which he had collected the scattered prætorian bands (between the Viminal and Colline gates), this same opponent continued: "There he courts every soldier by name. He woos and feasts the chiefest men of action, whose wants, and not their love, compel them to be his."

"Yet, hath he ambition?" asked Arruntius. "Is there any step in the state that can make him higher or more than he is?" "Nothing but emperor," replied Sabinus.

That was, in fact, his aim. But Tiberius, who had a faculty of seeing clearly, with his eyes, in dark night, apparently could not see clearly through the dark designs of his minister, at that time; and was persuaded to believe that the prætorian camp would make a good defense for him against the senate if that body should become rebellious and try to overthrow him. Silius and Sabinus, and their friend Cremutius Cordus—the honest historian of the civil wars—all believed that Tiberius had caused the poisoning of Germanicus, his own adopted son and a gallant general, out of jealousy lest that prince should displace him on the throne. Germanicus being dead, there remained between Sejanus and the emperor, the three sons of Agrippina, Germanicus' widow. A still more immediate obstacle was Tiberius' living son, Drusus, the heir of the empire. The wife of Drusus, however, was Livilla, or Livia, a woman of depraved character. Sejanus, by means of her physician Eudemus, who came to buy an office from him, established a guilty intimacy with Livia, and persuaded her to poison Drusus, who, be it observed, had also had the imprudence to slap Sejanus on the face and defy him. Having thus criminally disposed of Drusus—of course without the knowledge of Tiberius (to whom his son's death was really a bitter grief)—Sejanus next turned his attention to the removal of Agrippina's sons, Drusus junior, Nero, and Caligula (who afterward became emperor and a pest to Rome). He impressed on Tiberius the idea that they wished to be considered not only competitors for the throne, but immediate heirs to it. "Cæsar, 'tis age in all things breeds neglect; And princes that will keep old dignity Must not admit too youthful heirs stand by;—Not their own issue, but so darkly set As shadows are in picture, to give height And lustre to themselves."

Tiberius, accepting this view, proposed to imprison them; but Sejanus objected that that would now be too weak a measure. The better way would be to let them go on expanding in their unlawful pride; destroy some of their strongest supporters, on a pretext; and then slay the young princes.

"We would not kill, if we knew how to save;

Yet, than a throne, 'tis cheaper give a grave,"

was the yielding response of Tiberius, who straightway entered into the plot. Even while this conference went on between sovereign and minister, Caius Silius was saying to Agrippina, of Sejanus:

"He threatens many, that hath injured one . . .

No tree that stops his prospect, but must fall."

And Silius himself proved to be the very next tree that stopped the prospect. Sejanus caused him to be denounced, by another, because Silius, with his wife Sosia, had despoiled the province of Gaul, after conquering Sacrovir, and had boasted that his legions saved the empire. Silius defended himself in a burst of noble eloquence before the senate; but, seeing that he was doomed, he called upon all Romans who would know how to mock Tiberius' tyranny to look upon him (Silius) and learn how to die; then stabbed himself. Cremutius Cordus was the next victim; his crime being that in his history he had praised Cassius, and called Brutus "the last Roman." The laws of treason against the state in Rome, were exceedingly complicated, confused, and even vague. That of *læsæ majestatis** constituted it a crime against the sovereign to praise any one else. Words, nods, signs, were construed as treasonable; and hence a swarm of informers were constantly accusing men, either from enmity or jealousy, or from a desire of the immense wealth frequently heaped on the accusers. It was this state of things that Sejanus availed himself of to trap Cordus, who defiantly retorted that "posterity pays every man his honor" and would remember him as well as Cassius and Brutus. Being confined to his house until further disposition, Cordus in brave indignation escaped the tyrants by starving himself to death.

"This business hath succeeded well, Se-

* A betrayal of majesty or of the sovereign power.

janus," said Tiberius, "and has quite removed all suspicion that I am practicing against Agrippina and my nephews."

According to Ben Jonson, he was anxious promptly to strike down Agrippina's other allies. But Sejanus advised delay, saying, "Time shall mature and bring to perfect crown that which we have begun with such good vultures" (i. e., auguries). The wily minister's present purpose was to avail himself of the monarch's gratification, and press his own suit for marriage with Drusus' widow, Livia.

"I have heard that Augustus," he began, "thought of bestowing his daughter as a wife upon a mere Roman gentleman. I know not how to hope so great a favor, but if a husband should be sought for Livia, and I were thought of, as being Cæsar's friend, such an honor would not make me less watchful for your state, than now. But it might strengthen my house against Agrippina; and my chief desire in it is for my dear children's sake. I myself have no ambition but to end my days in service to so dear a master."

He had already, however, divorced his wife Apicata, in order to become the husband of Livia and the emperor's son-in-law. His eagerness excited the ruler's caution. Tiberius, without absolutely refusing the suit for Livia's hand, said he would take time to think, and pointed out the difficulties and dangers in the way; among them, a likelihood that the senate and people would object. "Men murmur at thy greatness, as it is," he explained; "and dare accuse *me*, from their hate to thee."

Those words secretly stung Sejanus, who, professing to drop the scheme of marriage, proceeded artfully to urge upon Tiberius a proposition which he had broached some time before, viz., that the latter should withdraw from Rome into Campania and finally to the island of Capreæ (or, as it is now called, Capri). The ostensible object of this absence from the capital was, escape from the petty cares and distractions of affairs at Rome, the clamor of innumerable suitors, and the envies and reproaches of hostile persons. "A quiet and retired life, larded with ease and pleasures," he argued, would give the needed relief, and yet would be favorable to sound counsels in "any weighty and great affair." But the minister's private theory was that Tiberius, in seclusion, would give himself up to those gross vices which he is supposed to

have indulged, and lose interest in the conduct of the state. In this way, Sejanus would have charge of everything, receive the emperor's dispatches, know his plans, and yet pursue his own designs; build strength for himself by conferring dignities and offices; and become "arbiter of all." Tiberius declared that he was resolved to make the journey, as planned. Nevertheless, though unwilling to betray doubt or fear, he began to dread the ambitious pride of Sejanus as being his worst danger. "All whom I have injured may have the desire to strike me," was his reflection; "but only the favorite has the *power*." And, as aconite is used to overcome the venom of a scorpion's bite, so he decided to use against Sejanus, whom he began to regard as a sort of poison, one Macro, a prætorian captain, who was to serve as a poisonous antidote. Summoning Macro, he gave him secret commands to watch everything and everybody, during his (the emperor's) absence; to spy, inform, chastize—explore, plot, practice as he pleased—not even excepting the great Sejanus from his observation; and assured him that he would be supported in so doing, as much as if the senate and the laws had given him privilege.

Macro was a willing and servile agent; for, he said,

"I will not ask why Cæsar bids do this, But joy that he bids me. It is the bliss

Of courts to be employ'd, no matter how." He cheerfully prepared to sacrifice truth, right, virtue, and conscience, in his new mission. But his expectations soon received a startling check, in the circumstance that Sejanus, who had accompanied the emperor on his journey, suddenly returned to Rome crowned with Cæsar's praise and fresh power to work his own will. It was an accident that thus restored the minister to his monarch's confidence. The two were sitting one day at meat in a natural cave adjoining a farm-house called Spelunca, among the Fundane hills, when part of the grotto-roof fell, crushing some of the attendants, and so frightened the rest that they fled. Only Sejanus remained steadfast and, at the risk of his life, by great exertion propping up the ruinous arch of the cave's entrance with his own body, saved Tiberius. Surely, the emperor may have thought, a man who was willing to protect him at such danger to himself could not be conspiring against him. So Sejanus, installed once more at Rome, and

alone, went on to carry out his designs against the household of Agrippina. He worked on the ambition of her son Nero, persuading him that the people and army desired him to supplant the emperor; and thus brought Nero under Tiberius' displeasure. At the same time he took apart another son, Drusus junior, and inflamed him with similar ambition and with jealousy of Nero, in order to divide Agrippina's house. Corrupting one of Agrippina's seeming adherents, Latiaris, he managed through him to ensnare Titus Sabinus into treasonable words which were overheard by two lurking spies, Opsius and Rufus; and having thus got rid of Sabinus—the last considerable supporter of Agrippina's interest—he caused that noble lady, with her son Nero, to be cited to the senate and banished, while Drusus junior was imprisoned in an underground room of the palace. Caligula, the third son, escaped the toils of Sejanus only by taking the advice of Macro, which was that he should fly at once to Capri, there give himself up to his uncle, Tiberius, and tell him that he chose no longer to live in peril of Sejanus' plots, which were also full of grave menace to the emperor himself; an assertion which Macro promised to corroborate. For Macro, seeing Sejanus once more in the ascendant, was stricken with deadly alarm for himself, seeing that he had been commissioned as a spy upon that high functionary, whose plots were "laid to his peculiar ends," and could not, consistently with common safety, be allowed to run on.

He therefore departed with Caligula, to seek Tiberius, whom free-spoken old Arruntius called "our monster, forfeited to vice so far that no racked virtue can redeem him." Arruntius asserted, as some historians have done—perhaps with truth, and perhaps in part with the calumny of repeating exaggerated rumors—that the emperor had lost all regard for his own fame or Rome's; that he studied murder as an art, devising new tortures; and spent his time "in the unkind abuse of grave astrology," by casting the horoscope of men's nativity, and, if he found good fortune predicted for them, putting them to death in order to show his power to frustrate fate; or in acting upon the stage, or immersing himself in licentious amusements. However this may have been, Tiberius found time to send to various persons at Rome—such as Laco, Minutius, and Pomponius—letters which greatly puzzled them and threw

every one into a state of uncertainty. Minutius found that, one day, Tiberius wrote that he was well and expected to return to Rome; the next, he would send word he was sick and did not know when he could come. In like manner, as Laco observed, to-day he honored some friend of Sejanus by a special writ, yet on the morrow would suddenly send punishment on some other friend of the minister. To one senator he would write in praise of Sejanus, to another he would say little about him; writing to a third, he made no mention of his favorite; and to a fourth correspondent he broke out in sharp rebukes of the great man. Meanwhile, Sejanus himself was made the colleague of Tiberius in the fifth consulship; yet Regulus, who was known to be Sejanus' enemy, was appointed to another consulship, by precise command of Tiberius. And, although altars to Sejanus were permitted to be multiplied, the emperor suddenly forbade all sacrifices to a man still living. The result of all this confusion and apparent contradiction was, that no one knew what to believe as to the intentions of Tiberius, nor as to his real feeling about Sejanus. This was no doubt what Tiberius wanted. It tended to break up plots that might be forming against him, by making every one insecure, and also helped him to draw out the opinions of different men regarding Sejanus.

The fawning adulators of the latter were so misled that they declared him to be the real emperor, and Tiberius only the ruler of an island. Sejanus himself believed that he stood near the apex of his ambition, and began to long for something even higher than to be Cæsar. But, all at once, a strange portent occurred. The statue of Sejanus, in Pompey's theater, was seen to send forth clouds of black and dreadful smoke; and, the head being removed, a monstrous serpent leaped out. Sejanus scoffed at the sign, and asked, with regard to the serpent: "Had it a tongue as forked as flattery, or did it look of the hue like to such as live in great men's bosoms? Was the spirit of it Macro's?" His friends, nevertheless, induced him to offer a propitiatory sacrifice to Fortune, so as to ward off whatever harm might threaten. But when this was done, and the image of the goddess turned away from him in disfavor, he overthrew both her statue and her altar, exclaiming that she might keep her face averted till he bade her turn again; which would be never. "That I," he added, "who have been entitled and

adored as a god, sacrificed unto as no less than Jove, should have been brought to do rites to this peevish wanton—perhaps it was the shame at the thought of my doing so, that made Fortune turn her face, knowing herself the lesser deity!" But close upon this incident came the news of Macro's return to Rome, and Sejanus, learning that he was in conference with the hostile consul Regulus, began to realize his danger, and to gather and arm his friends for the worst. "These things, now, begin to look like dangers worthy of my fates," he mused. "I, who helped to fell the lofty cedar of the world, Germanicus—if, Destinies, you will that, after all, I faint now before I touch my goal, yet I have already done things great enough! All Rome hath been my slave. All the fathers have sat ready to give me empire, temples, or their throats, when I should ask 'em; and—what crowns the top—Rome, senate, people, all the world have seen Jove but my equal, Cæsar but my second."

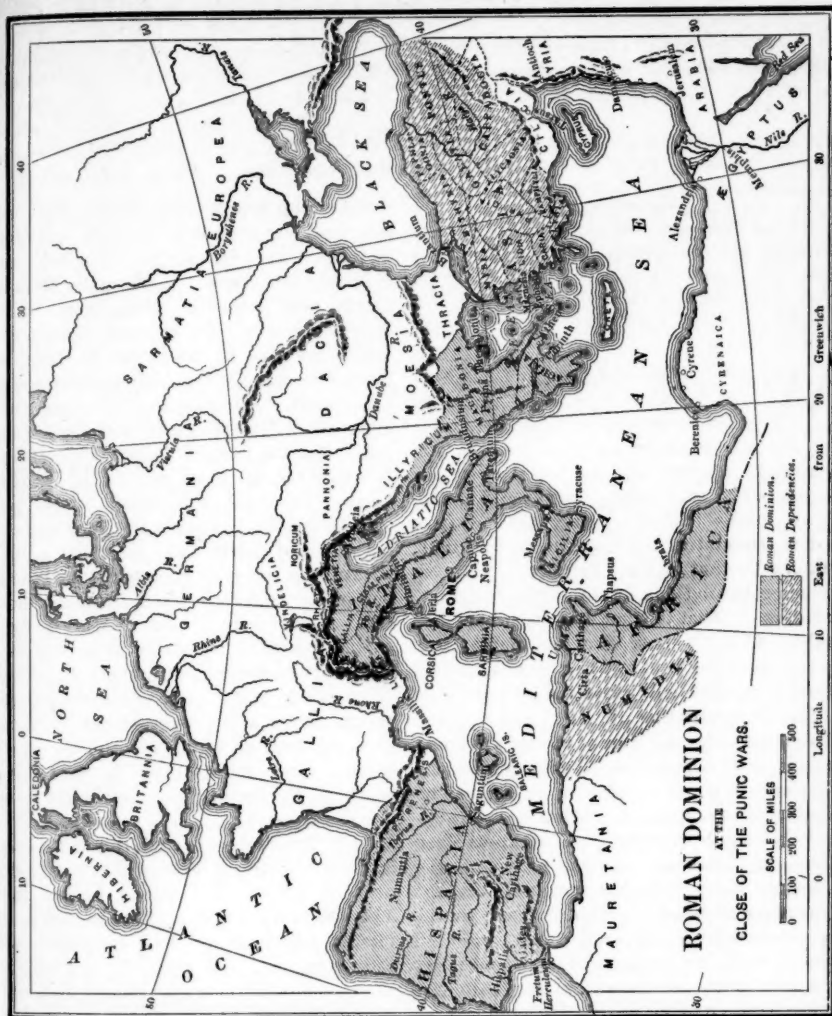
Macro, knowing the danger of the secret task with which the emperor, now fully warned of Sejanus' plots, had entrusted him, and guessing how fiercely Sejanus might struggle against fate, sought an audience, and disarmed the fears of the minister by assuring him he had been sent by Tiberius privately, to tell only the consuls his purpose of immediately raising Sejanus to the great office of tribune. The secrecy of the proceeding, he said, was to make the surprise of this high honor all the more agreeable. Sejanus, in great feather again, readily and unsuspectingly attended the early session of the senate, convened for this object in the temple of Apollo. There he was received by the senators, among whom the rumor had been spread, with cries of "Hail, great Sejanus! Noble Sejanus! Honored and worthy Sejanus!" But Macro, in obedience to the emperor's commands, bought off the prætorians with a largess, surrounded the temple with the night-watch, and gave orders that no one should be allowed to come out. Regulus then announced a letter from Tiberius, which was read aloud. It was long, and artfully worded. After throwing out hints adverse to Sejanus,

it went on to allay suspicion and discountenance severity, but finally counseled that the senate deprive Sejanus of all offices, and try him on grave charges. This was enough. The sycophantic senators, who lately hailed him so loudly, fell away from Sejanus, in terror. He was insulted and maltreated by Macro, hurried to the Mamertine prison* by the consul Regulus, and put to death that evening. His body was given to the populace, who with mere impersonal and blood-thirsty rage dragged it through the streets and tore it into fragments, until nothing of it remained for the executioner to throw into the Tiber. His children, too, a son and young daughter, were killed, and flung on the Gemonies.† Contemplating this hideous end, Lepidus, a man of unstained character and of the highest rank in Rome next to Cæsar's, but who had held aloof from all the conspiracies and informings of the time, exclaimed: "Who would depend upon the popular air Or voice of men, that have to-day beheld That which—if all the gods had fore-declared—Would not have been believed, Sejanus' fall?"

But it was not dependence on popular will, that ruined Sejanus. It was the execrable system which prevailed, that of governing without regard to the popular will. Sejanus had for years counseled Tiberius to seek safety in plots, suspicions, slaughter, and the aid of spies and informers. When he himself turned traitor to his mighty patron, these same weapons were brought to bear against him; and with them he was crushed in a day.

*One of the oldest of Roman prisons, said to have been founded by King Ancus Martius and enlarged by Servius Tullius. It was built under the capital and consisted of two subterranean chambers, one underneath the other. It was also called the Tullianum or Tulliarium after Tullius, though the latter name was often applied only to the dungeon proper, or the lower prison, which was either so deep as to have the floor covered with water or else had a well dug in it. Jugurtha the Numidian King is said to have exclaimed when thrown into this prison to starve, as he touched the water on the bottom, "Hercules! how cold are thy baths!" Ancient traditions say that both St. Peter and St. Paul were confined in it, and led from it to their death.

†Often written *Gemoniæ Salæ*, "Bridge of Sighs." The steps on the Aventine Hill leading to the Tiber, down which criminals were often flung and then dragged with hooks to the river into which they were thrown.



MAP QUIZ.

1. What was the distance between Carthage and Rome?
2. What was the limit of Roman territory at the opening of the First Punic War?
3. What was the extent of Carthaginian territory at the opening of the First Punic War?
4. Locate the scene of the first action in this war.
5. What were Rome's first two foreign provinces?
6. What state was formed by Carthage to take Sicily's place?
7. Where was the home of the Illyrian pirates?
8. Trace on the map Hannibal's route from Carthage into Italy.
9. Mark Ticinus, Trebia, Trasimene, Cannae, and Zama on the map.
10. What were the theaters of action in the Second Punic War, exclusive of Italy?
11. What increase in Roman territory resulted from this war?
12. What relations to Numidia did Rome establish at the close of the Second Punic War?
13. What change in Macedonian boundaries resulted from the battle of Cynoscephalae?
14. What enlargement of Roman dependencies resulted from the battle of Magnesia?
15. When was Roman dominion declared over Illyricum, Macedonia, and Greece?
16. When was the province of Africa formed?
17. What change in the relations of Rome to Macedonia and Greece took place in 146 B. C.?
18. Locate the battle-field which resulted in Spain's becoming a Roman province, which first gave Rome a footing in Macedonia, which gave Rome the Western provinces of Asia Minor.
19. What was the distance in miles between the east and west extremities of the Roman dependencies at the close of the Punic Wars?
20. What was the distance between the north and south extremities of the Roman dependencies at the same time?

SUNDAY READINGS.

SELECTED BY BISHOP VINCENT.

[November 3.]

Let all bitterness, and wrath, and anger, and clamour, and evil speaking, be put away from you, with all malice: and be ye kind one to another, tender-hearted, forgiving one another, even as God for Christ's sake hath forgiven you.—
Eph. iv. 31, 32.

WHAT a strange change it had been for St. Paul's converts, as they passed out of the old into the new—the old so rough, so angry, so violent and venomous, so loud and so brutal—that life woven out of such bitter threads and melancholy hues—"debates, envyings, wraths, strifes, backbitings, whisperings, swellings, tumults"—that life of the flesh, "hatred, variance, emulations, wrath, strife, envyings, murders." That is what has been banished and crucified by those who had found themselves, amid the heat and tumult of that loud quarrelling, suddenly mastered by the vision of Him who won them by His meekness and His gentleness—the Man of human kindness, the Priest of compassion, the King of Peace, the Lamb of God, "Who, when He was reviled, reviled not again." This was the message that had reached and held and possessed them, the message of the preacher who besought them "by the meekness and the gentleness of Jesus." Who can measure the sweetness with which such words would fall upon a world hot with angry feuds and bitter revenges—"the meekness and the gentleness of Jesus"? As cool water to fevered lips, so the kind words stole in as a blessing upon those who crept out of the tumult to hide their wounds and weariness within the comfortable fold of that Good Shepherd who led them into such rich pastures and by such quiet waters.

And yet we all of us are subject to a suspicion which suggests that possibly something, after all, may have been lost in the passage from the old state to the new. Very rough, very uncomfortable that old condition of things may have been; but was there not a vigor in its vivacities and a robustness in its violence that we miss in the kindly new? Is there no loss of manliness in passing to this new temper? and is it fitted for the actual

world? For rough work needs rough methods; and our work here is rough, and cannot be pushed through without a good deal of energetic emphasis. And, again, there is a hearty and muscular naturalness in that boisterous scramble of man against man, which we like in books and in plays, even though in real life it is rather oppressive and unpleasant. And this humility, this gentleness,—they disturb us as something unnatural, artificial, labored. Are they quite real? Are they not apt to be very full of provoking mannerisms and insincerities? So every one, I suppose, has said to himself again and again; and with this suspicion at work within him he easily accepts the more formal and public criticism which is familiar in our ears, pronouncing that these Christian graces, beautiful as ideals, charming us as spiritual excellencies with their choice flavor of exquisite piety, do nevertheless represent an unearthly and unsocial type of virtue; that we lose as citizens what we gain as saints; that by walking in the Spirit we cease to be equally effective forces for economic purposes.

Now, this suspicion and this criticism are familiar and strong because they have a great deal of plausible evidence behind them. There is much in our religious habit and temper which would tend to confirm what they suggest; and certainly our religious thought has failed to give us any logic which would displace the suspicion or expose the criticism; and through this we are easily led into three great disasters.

First, there have been bred up among us a public mind and tone which have so deeply accepted these assumptions of which I speak that it has been found easy for science to persuade us that wherever the root instincts of men are allowed free play they are necessarily selfish; that from this primal and calculable motive all the vigorous and positive qualities of industrious production issue; that the degree of vigor so displayed will be in proportion to the amount of selfishness in action; and that, however much this natural impulse may and ought, for ethical reasons, to be checked and limited, yet such checks and

limitations will curtail the normal action of commercial industry according to the degree with which they repress the free play of self-interest. That is a well-known position which we have allowed to pass, and in which we have detected no flaw. Perhaps its careful abstention from the moral region succeeded in putting us off our guard.

But then there comes the second disaster, that when the parallel position is taken in that region of ethics we seem to have lost our power of protest. Who does not know how naturally, how obviously the argument meets us? Who can resist its patent evidence, its plain and plausible logic? Our eyes are taught to range over the turmoil of a swarming and warring life of nature; and everywhere we learn how all things push forward to self-preservation, toward fuller living. And when we pass from the lower level, without any perceptible break, into the long strife of human progress, surely it is the same law, that we cannot but detect, directing and ruling the advance—the law of preservation, the methods of self-interest. Men struggle to endure and to grow; and the principles which best serve that endurance and that growth they call Ethics; and, if so, then, since the forward movement derives its force from self-interest, ethics have inevitably their justification in a wise and skillful selfishness. This we hear, and religious and serious people, though they do not like the sound of it, practically abstain from denying it, and at last doubt whether it can be denied.

[November 10.]

And there follows a third disaster. They are driven to suppose that heroes and saints, who use very different language, have in reality, unknown to themselves, this very motive at work which they most violently repudiate. The saints imagine that they are losing their all for Christ, while in reality that is impossible; no such vigorous action as they put forth could be produced by anything short of self-interest; they, too, must be, in the end, in pursuit of their own happiness. They do not think so, because they ask for no happiness on earth, but that is only because they have caught sight of the richer blessing to be theirs hereafter. It may be true that all ideal ethical systems repudiate this self-interest, but they can only mean to repudiate the lower and lesser in view of the higher and the better; for all

ethics must be bound to assume that man, in acting, seeks his own perfection and happiness, and is, therefore, in a high sense selfish.

Now that, you will say, is philosophy, and none of us here may be philosophers; we cannot therefore travel into the discussion by which such a problem will be finally solved. But one thing we all can do, and it is very urgent that we should do it; and that is, that we should try to make out what it is we mean by selfishness, and what by unselfishness; for it is this word "selfish" that, after all, is the difficulty.

Are we at all right or rational when we assume that all action which vigorously advances the fortunes of the agent is for that reason to be called selfish? We have made these theories, we have let ourselves assume this; but why? Surely St. Paul is rather a hard instance to bring under our assumption. No one, I suppose, pretends to doubt the genuineness of the Apostle's self-surrender. Unselfishness, as we know, was with him a passion—the master-passion of his life. But is there, then, in him none of that vigorous vitality which works ever upward and onward? Is there, then, no assertion of the fullest personal energies? Were his cravings unliberated? were his forces unused? was his character typically one of repression, of curtailment, of subdual? Was there in him no burning curiosity, no pertinacious aspiration, no splendid ambition, no striving after perfection? Had he, then, no purpose, no chosen prize set before him for which he hungered, and in the hope of which he endured? How his own words leap to our memories to answer our questions! Always he ranks himself with those who stand as types of strenuous life. He was as an athlete bent on a prize; he was as a runner with his eyes set on a far goal. This eager, passionate, burning pursuit of the perfect manhood, of that excellency which is made open to him by Christ Jesus—which, looked at from without, is surely identical in appearance with that impetuous craving which pushes all men forward toward their highest interest, and which we have assumed to be selfish, wherever it appears. If, as spectators, we were asked to describe that vigorous assertion of a vital self which is the root-impulse of all natural life, what words should we choose, what words should we prefer to those which speak of "forgetting the things which are behind,"

of "reaching forward to the things which are before" us, of pressing toward a high mark—toward some secret perfection! And yet all this in the Apostle proceeds out of the very heart and heat of his *unselfishness*.

Evidently we have been too vague in our generalizations; we have classed with selfishness what may very well belong to unselfishness. How have we made the blunder? By assuming that all movement toward the better life has self-gratification for its final motive; that all vigorous assertion of personal life proceeds out of selfish greed. Christianity challenges that assumption all along the line; it denies that the pursuit of the higher life need be, in any sense or degree, necessarily selfish. It may be selfish; but it is just as possible that it is wholly the other. And, more than that, in all its most energetic and effectual types it is sure to be unselfish, for selfishness is never, as a practical fact, able to kindle into life the more fervent and daring forms of self-assertion. The selfish man seeks his own good very sluggishly; it is the unselfish apostle who pursues it with the zeal of a martyr and the passion of a saint.

Let us attempt to make this clearer. What exactly does it mean, to say that one's own good is selfishly sought? It is selfishly sought only when it is desired for the sake of the gratification it brings. Success is selfish, when it is craved not simply as successful action, successful attainment, but because of the feeling of pleasure, which is not success itself, but is that which accompanies success—that feeling that we know so well, of gratified importance, which glows and warms within us as we watch over our own success. We may often hunger for success in order to feed this feeling, and then success, no doubt, is selfishly desired; but must it be for this for which we desire success? Have we always this after-feeling in view? Is there no such thing as desire for success simply as success, without a single momentary thought of its reflex action which will follow upon ourselves? Why, the whole history of man, the whole sum of experience is loud with the answer. Take any workman, take any artist—what is the secret of their inspiration? What is the key to all their highest work? Surely nothing but the work, the love of the work, the love of good work as such, the desire to see the effort of labor issue in the finest result. That is their end; that is their

motive. Good work satisfies them as good work. It wields a continual fascination that draws them forward at all costs and at all risks to themselves—through austere discipline, through long hours of weary disappointment, through hunger, and cold, and nakedness; and they ask no question why; they would be wounded and stung as with a whip if you hinted that it was because of some after-pleasure to themselves. They are happy, no doubt, in their work—this they cannot help being; but to think much of that happiness is, they know well, to ruin their work, to sap their zeal, to undermine their skill.

[November 17.]

And it cannot be that they are deceived, that they have beguiled themselves into a condition of self-deceit in which they cannot distinguish what is selfish from what is unselfish; for vanity, selfishness, self-love, the sucking of the grapes of gratification—these are all passions still in them which they know quite well by experience, since every day they feel them mingling with all their inspirations. But that which they so feel and know, they know also to be utterly distinct from the inspiration which makes them artists, and they know also that the further such motives as those extend, the less genuine is their artistic work, and that if those motives altogether prevailed they would cease altogether to be artists. No man has ever produced the highest artistic work for the sake of the pleasure it brought him; such an aim inevitably drains the life-blood out of his heart.

And in business and in all employments the same impulse tells. He is the best workman who works for the sake of the work;—the merchant, for instance, who has forgotten what he can gain by being richer, but who has the keen zest of a sportsman for following up a scheme, and the fascination of an artist in the handling of his funds. In everything work would be at a standstill if there were not in vigorous action something more than the motive of gain—the delight in the result being produced in the best possible way and on the best possible lines; and wherever, throughout a country, this artistic motive in work languishes, there the productions deteriorate and the trade must fall.

That is the verdict of a world-wide experience, and Christianity seizes on it in its pri-

mary truth. Did you lightly suppose that there was no motive but self-interest that roused men to the pursuit of their own good? Christianity frankly, yet firmly, says exactly the opposite. When has selfishness ever spurred men to heroic audacities or lifted them into splendid action? How often has selfishness won any ardent and eager disciple? A great mass of very commonplace and ordinary activity can be accounted for by it. When we have no strong motive working upon us, then it is that we fall back on self-interest; when we are indifferent, undetermined, idle, then it is that we set to work to calculate which course will please us most, or by which path we shall win most gain. Selfishness is the dull drudge that sweeps the house, that does a good deal of plain and obscure and plodding work for us; it has sufficient force to carry us along through commonplace matters where we need no special effort. But whenever we are really roused, or alive, or strenuous, or enkindled, then we throw the calculations of selfishness to the winds, we laugh at the question of our gains, and forget to ask what will come of it all—we feel only the keen craving, that at any cost our cause should win; we throw ourselves into it, we give ourselves to it just as runners who yield themselves up to the passion of a race, and run as if there were nothing in all the wide world to be done but just to run and to win, without ever dreaming of asking the why or the wherefore.

Nor is it only the joy of the artist that is the seed of vigorous action; there is another motive, even more powerful, more universal, and more fruitful—the motive of love. A man will do far more for the love of others than he ever will do for himself; he will display a finer vigor, a nobler patience, a steadier courage, a fuller energy on behalf of mother, and home, and wife, and children. Nor is it only others that he helps by doing this; it is himself who is vitalized by the new hope; it is his own being that is enlarged and enriched. He is made a better man by loving. We have all seen it. A young man without responsibilities, left to himself, with nothing but his own interest to serve, how idle, how profitless he is, how meager, how sluggish! Even though all his future prospects depend on his industry he cannot be got to put himself under pressure; no calls, no reproaches, no warnings, will induce him to put his energies out in action; he is self-

ish, and because he is selfish he is idle. But how he has surprised us when the touch of love has laid his hand upon him. For, lo! he is a new being, his manhood stirs, his will quickens, his senses are all alert. Night and day he schemes how he may win prosperity; he toils with perseverance, he endures with a valiant cheerfulness of which no one believed him capable; and all through the long days that follow, as he thinks of her in the house with the children, he will set himself to the grim task of life with an ardor that would have died out if it had been but his own poor, pitiful self for which he was spending his strength.

And do you retort that such love is, after all, but a piece of indirect selfishness, that it is for his own joy that he works when he works on behalf of his wife and his home? Then, if so, why is indirect selfishness so much more vigorous than selfishness when it is direct? A motive, if it is the animating motive, must surely be most effective when it is most visible, most distinctly present. How is it that selfishness is so far more powerful when it conceals itself in the love for another and pretends to be unselfish? Surely we are playing with words when we reduce life to such a game of pretense. Love, as a fact, moves by charming a man into self-forgetfulness, by absorbing him in devotion to another; and through this, and this alone, it obtains its motive power. If a man could persuade himself that in loving another he were really loving himself, why, his very love would perish at the discovery.

[November 24.]

Self rouses itself, then, into vigorous activity only when it serves an aim other than its own gratification, and, above all, when it loves; and if love could be raised to the highest power, then the vigor and vitality of that personal self would be at the very height of their fullness; to be given the power of loving would be to be given the power of living. And therefore our creed woke a dying world into new life by bringing to bear upon its stiffening limbs and chilled heart the invocation of a God whom it could love. It was dying, that old world, and dying of selfishness; but it woke under the presence of a Lord and Master to whose graciousness and to whose beauty it could offer the honor of an unselfish service and the glory of an unending self-surrender. It was aroused to do

for Him what it had not the spirit to do for itself. The weariness of self-service, the daily melancholy of self-love—they fled away like a cloud before the hope of an eternal devotion to the Name of Jesus Christ; and, instead of the tired, dispirited Pharisee, sick to death of self-service under the law of works, you have the great Apostle of the Gentiles, illumined, radiant, transformed, endowed with power upon power, energy upon energy, gift upon gift, "in labors more abundant, in stripes above measure, in prisons more frequent, in death oft." Active, strong, inexhaustible, he now finds store upon store of treasure within his soul, once so dry and so bare. "Who is weak, and I am not weak? Who is offended, and I burn not?"

Selfishness is bound to flag. It brings upon us poverty of blood, loss of brain and heart, a sunken, tired, and burdened life. Is it not at the root of so much in us that is dispirited and disheartened, and fretful, and listless? You meet men and women who drag themselves along, who are dim with sheer indifference, who find no light and no joy in all that this world can bring them. My brethren, when this humor creeps over us, let us closely examine and see whether it be not some self-seeking that has brought it upon us. For life will look sordid and meager and meaningless, after a time, to a man of selfishness. He feels it profoundly stale and unprofitable, he realizes so little, and there is so little that is worth the cost of realizing. The aim is mean, and it is impossible to be energetic for long in serving its claims;

but love, love for others—this enriches, this enkindles, this evokes in us the desire to be better men; it sustains us in the effort of self-improvement. "Love fulfills the law." Everything becomes possible to those who love. The commands of the Lord are no longer grievous, for the soul that loves is gifted by that love with fresh energies; it discovers in itself unsuspected possibilities, and is supplied with ever-flowing currents of new vigor. The impossible becomes possible to all who look to another and love—the hard loses its hardness, and the grievous ceases from grieving. Love enlightens, and warms, and cheers, and renews, and again and again the self within us presses forward under its sweet breath toward the hope set before us.

Unselfishness is the only salt that preserves our soundness; unselfishness is the only fire that purifies, and refines, and betters, and makes perfect. We shall be enabled to do so much if only we love. We live by loving, and the more we love the more we live; and, therefore, when life feels dull and the spirits are low, turn and love God, love your neighbor, and you will be healed of your wound. Love Christ, the dear Master, look at His face, listen to His words, and love will waken, and you will do all things through Christ who strengtheneth you.—*The Rev. H. S. Holland, M. A.**

*Canon of St. Paul's in London. He is the author of a volume of sermons on "Logic and Life," and one on "Creed and Character." From the latter these selections are taken.

THE CAUSE OF GEOGRAPHIC CONDITIONS,

BY PROFESSOR N. S. SHALER.

Of Harvard University.

THE only way in which we can secure some idea as to the manner in which the greater land masses of the earth have been formed, is by carefully studying some small portion of their surface and thereby acquiring an idea as to the methods in which lands take their shape. No student, however long he may have studied the continent, however much he may have tracked it over in rapid journeyings, will gain by such hasty study an adequate idea as to the history of the area. He must begin by becoming well

acquainted with the conditions and history of a small area such as is about his dwelling-place, which he sees often and may come to know well. Having learned what is to be known concerning this little field, he may gradually extend his knowledge until he has a general idea as to the process by which the wider realm has grown.

Every one, however limited may be his condition can know a small part of the earth in a very thorough-going way. It is easy in the course of a few years to become intimately

acquainted in leisure days with an area say ten miles square. Although small patches of the earth vary much in the story they have to tell, even more than the ease with which the history may be interpreted, every such surface has a vast amount of information to tell freely to the patient inquirer.

There is a cardinal rule adopted by all the geologists of the present time, which the student will do well to bear in mind. It is as follows: In the effort to interpret the past history of the earth, in the endeavor to trace the ways in which the surface of the planet has come to its present aspect, the student should begin by considering the causes now in operation in the field of his inquiry. When he is well-informed as to the work which the geological forces are now doing on that field, he may from the light which this study of the moment affords him, proceed step by step backward into the past, guided always in his search into the action of other days by the light the present affords.

Where the student is so fortunate as to dwell amid the open fields and woods, it will be easy for him to begin his study of historical geography on the country about him. If he unhappily is confined to a large town, his task is less easy, but by no means impossible. Although the use of the earth's surface for cities to a great extent destroys its original features, there is generally enough of the original nature left to guide the intelligent observer. He can in excavations made in the construction of streets or of cellars commonly gain an idea as to the character of the original earth. From time to time he may escape beyond the limits of the town, and from the surrounding country gain information which will better enable him to apprehend the character of the earth which lies beneath the built districts. In beginning the study of any area it is well to set at least for a time a limit to the field which is to be observed. To do this it is desirable to take a map and on it mark off, as the region for the inquiry, an area which has distinct geographic boundaries. Where convenient, the valley of a stream should be selected, for, as we shall hereafter see, it is desirable to acquaint one's self with what goes on in a river system however small it may be. The valley of a brook or little river with the bordering hills and their slopes extending to the channels of the neighboring streams will afford a good geographic limit for the proposed study. Of

this region the student should have the best map which he can procure and this on the largest scale, that is with the greatest number of square inches of map to the given number of square miles of territory. However poor the map may be, and in most cases it is apt to be very imperfect, it will greatly aid the inquirer in making notes on his observations as well as in forming a clear idea of the region which is to be studied.

With the map in hand, the student may spend a number of pleasant days in walking his field over and in gaining a personal knowledge as to its outlines. He should note wherein the map is defective. He is sure to find a good many small streams which are not well put down, and many hills which are not indicated on the chart. With such skill as he may have, however little this may be, let him try to correct these errors, making changes by pencil lines so that he may afterward correct his own mistakes as well as those of the map-maker.

In the course of his walks the student will easily observe that the earth he treads over is commonly made up of two distinct kinds of deposits. The surface is generally covered by a layer of broken up material, the principal part of which constitutes the soil or the layer in which the plants feed. Many chance sections, road-ways, or places where the water has gullied deep into the earth will show him that beneath this soil layer there is a deeper deposit shading downward from the soil to the bed rock. These bed rocks he will generally find more or less sharply contrasted, generally clearly demarked from the overlying broken up material. If as here and there happens, the bed rocks are of soft sand and clay they may at first appear insensibly to merge in the superficial deposits, but in almost all cases the student will find on looking closely that there is a division between these two classes of materials which make up the earth's crust, the detrital or superficial accumulations lying irregularly over the bed rocks of a harder nature.

Having gained a fair general notion as to the character of the field which is to be the place of his inquiries, the student must now turn his attention to the way in which the geological forces which are operating or have operated on the land have affected the field. Following our general principle of beginning with the actions of to-day and among those using the most conspicuous and familiar, let

us see how the rain-fall of the country is season by season affecting its character.

To see the work of the rain the student should go during the spring-time when heavy showers are falling, to some upland portion of his field, by preference choosing the part of it where the torrent beds are most deeply cut in the hill-side, selecting if possible for observation two areas, one forest-clad, the other subjected to the plow and thus bare of its natural coating of vegetation. Taking first the wooded sections, he may observe that the rain at first has no distinct effect upon the earth, the water sinking into the forest mat as into a sponge and disappearing from sight; following down the slope into a valley he soon finds it emerge, forming a little stream which in the beginning courses over the dead leaves and decaying branches. Descending yet farther the water gains sufficient volume to attack the soil, but has not succeeded in cutting completely through the detrital layer. Yet farther down with the increased volume the stream sweeps the soil away and attacks the bed rock. At this distance below the hill-top the valley may be said to be fully organized and the water to be doing its ordinary geological work.

Before going further with the history of the rain-water it is well to note the fact that this water when it comes upon the earth is quickly divided into two divisions, the geological history of which vary greatly. A part of it remains on the surface or at most creeping along below the level of dead leaves which cover the surface. Another part, generally smaller, passes into the soil to emerge at lower levels in the form of springs. Only a few of these springs appear in an evident manner as distinct fountains. A great part emerge from the ground along the beds of rivers or brooks. In most countries nearly all the ground water creeps downward as a broad underground sheet and finds its way into the streams in the unseen manner just described. Wherever there is a distinct spring, the observer may note that there is a peculiar shape to the underlying rocks, the beds below the soil which control the movement of the underground water. Generally springs appear where there is a basin-shaped irregularity of the rocks, which is filled in with the detrital or soil materials. As an important aim of the student should be to learn the ways in which surface phenomena depend upon the understratum of the earth, he should interpret

the character of the under rocks. He should attend to these appearances of springs in order that in time as his skill in reading riddles of the under earth increases, he may explain the peculiarities in the position of the unseen rocks.

Turning again to the history of the over-ground water in the brook, we find that when the streamlet attains the dimensions in which it cuts away the soil and begins to rend the under rock, we here perceive a number of things of much geological importance. If the beds over which it flows be of ordinary hardness, we readily note that the water alone is incompetent to erode the stone. In ordinary stages of the stream, it runs clear; the water, indeed, may be of crystalline purity. On the boulders and pebbles which abound in the bed we may find a temporary growth of water plants which are not even disturbed by the current; but in times of flood, the increased volume of the torrent moving swiftly sets these pebbles in motion; they strike blows against each other, scrape and bound against the bottom and sides, and in this way act as mill-stones to grind the firm set rocks of the torrent bed. The smaller pebbles and grains of sand which come between the larger fragments in their movement or lie like grain between the upper and nether mill-stones, the boulders and the bed rocks, are also rapidly ground to powder and muddy the water of the stream.

The observer will also notice that the earth or other detrital matter on either side of the brook is here and there cut away by the torrent. Its fine material is carried rapidly downward and the coarser fragments converted into boulders which replace those mill-stones, the boulders, which are constantly wearing out with their rude movement. It is easy to see unless the soil lying on the slopes which border the torrent was in motion toward the stream, the water would soon cut away all the detritus within its reach, in a century or two there would be only bare bed rock next the brook. Careful observations show that the soil-coating and other débris on the steep slopes which lead from the hill-tops toward the stream is in constant and in slow motion toward the torrent. Each time the soil freezes in winter, it expands a little, and because it is easier for it to extend down hill it moves toward the deeper part of the valley. Every root which, beginning as a fine tendril, enlarges

to a great branch and presses the stones and earth apart and so moves them down the slope. It will often happen that on the sloping hillsides there are large fragments of rock which can be referred to some bed higher up in the hills. It is thus easy to prove that this slow journey of the *débris* toward the bed of the waters is constantly going on. The fact is the hill-sides are like the hopper of an ordinary flour-mill which slowly feeds the grain in between the mill-stones.

It is easy to see that the speed with which the torrent flows depends upon the steepness of the surface over which it moves. It is well to determine the difference in the velocity, which may readily be done by putting bits of wood in the stream, noting how far they journey in a minute of time. The rate of the movement, as will be readily seen, depends not only on the steepness of the slope, but on the twisting and turning which the water has, to escape from the obstacles which it encounters in the way of boulders or sharp projections from the sides. Generally, however, it will be found that the speed of motion increases very rapidly with the increase in the declivity. It will not be so easy to observe a point of much importance, viz., that the force with which the water urges the stones onward augments with amazing rapidity with each addition to the velocity. It has been found by experiment and computation that the violence with which the water urges pebbles over the bed increases at least as rapidly as the cube or the third power of the speed. Thus water moving one hundred feet in two minutes propels pebbles several times as violently as if it moved one hundred feet in three minutes. The result of this difference is easily seen in the study of any ordinary torrent bed. We find that in the steeper parts only the larger boulders are left; all the smaller fragments having been moved down to points where the stream has a less rate of flow.

It is to be hoped that the field in which the young observer is making his inquiries will show him how the torrent passes into the river. It will be profitable for him to seek wherever he may find it, a place where this transition can be observed. Passing down the stream bed we generally find that the rate of the declivity continually diminishes, until at certain points we observe on one or both sides of the stream a slight rude bench or shelf which borders the waters, and, ex-

cept in times of greatest flood, rises a little way above their level. Examining the structure of this shelf we at once perceive that it is composed of stone in form and other characteristics exactly resembling those which are borne onward by the stream. These fragments are rudely huddled together with a faint trace of stratification or layers in the mass. Though most of the materials are very coarse, here and there we will find small pebbles and sand crowded between the inter-spaces of the larger bits. At this stage we enter upon the new field in the life of the stream; hitherto its waters by the swiftness of their motion have been able to sweep away all the waste which came to their beds; for they have the violence suggested by the name torrent, which is applied to the swift flowing head water region of rivers. With the beginning of the alluvial terrace we enter upon what we may term the true river section of the stream. Thence onward to the sea, except it may be here and there where the waters resume their torrential character in water-falls or rapids, this terrace is continually present, sometimes on one or the other, sometimes on both sides of the stream.

The construction of terraces, as will be readily seen in the field, is due to the fact that owing to its less sloping bed and diminished energy of flow, the river is not able to bear on detritus as coarse as that which is borne to it by the swifter flowing torrents whence its waters are mainly derived. The pebbles accumulate on the side of the river where the current is less swift and so begin the formation of the terrace. Each flood sweeps more material into the eddying waters and so lifts the terrace to a higher level. Soon the trees and other plants seize upon it. The mud in times of high water is caught between the interstices of the plant stems and so the terrace grows until its summit is as high as the flood attains. The river portion of the stream system may be described as the part of its path in which its wrestling with the *débris* which has been contributed to its bed is in larger proportion and of coarser material than it can bear away to the sea. This section of the river, though it commonly flows on bed rocks, has its sides determined by the material in the form of terraces on either bank.

As soon as we enter the river section of our drainage system, we observe a great change in the form of the stream's path. In the tor-

rent the waters run in an irregular zigzag course, their path being shaped by the rocks which make the boundaries of the current. In the river we see at once that the bed swings to and fro in broad curves which are always cutting back on their concave sides and building it on the convex sides of the bank. Various accidents affect these swingings of the river-bed. In a small river the fallen tree which embarrasses the movement of the water where it is excavating a bank, may compel it so far to alter its movement as to cut the terrace at a point where just before it was adding to the shelf of detritus.

In the greater rivers this swinging of the stream, due to the change in the points of cutting and filling, depends upon very complicated laws which we shall not here discuss. It is easy to see, however, that if time enough is given, the river will wander to and fro over the alluvial plain, taking to pieces all the terraces which it has constructed and in their place building new detrital shelves. In large part the detrital shelves of any river are destroyed shortly after their formation; but all the while the stream is cutting its bed downward into the earth, and thus here and there portions of the shelves are left clinging to the sides of the valley far above the level of the existing stream-bed. Thus in the valley of the Connecticut River, there are three or four of these terraces marking ancient and higher positions of the river bed, the uppermost of which is some hundred feet above the present level of the stream.

Selecting the highest and therefore the most ancient of the terraces which the valley affords, the student should avail himself of some natural excavation which may show him the character of the deposit. He will find commonly that the material of which it is composed is considerably decayed. Comparing it with the detritus now moved by the stream, we observe that the larger part of the pebbles have rotted away on their outside so

that a coating may readily be scraped off with a knife. Some of them may be pulverized with the fingers. Viewed with the glass the grains of sand are seen to be likewise softened. If we observe where the brooklet cuts its own terrace, we may note that a considerable part of the material readily dissolves and goes away in the water. These indications are precious, for they tell us of one of the most important of all the processes which go on in river valleys. Lying for thousands of years in their place, the materials of these terraces become decayed. When the river washes the terrace away, a large part of the material falls to the state of powder or is completely dissolved in the river waters and taken away to the sea. Entering into solution with the waters and passing with them to the ocean, this dissolved rock material becomes the food for marine plants, which in turn give it to the animals, and so the life of the sea is nourished. The vast alluvial terraces of the world's river systems are in fact great laboratories in which the rocky matter ground up by the torrents is gradually subjected to chemical decay and made ready to enter into the complete solution to which it attains when it passes from the river mouth.

Having attained to this state in his observations on the movement of running water or on that part of it which courses over the surface of the ground, the student should by carefully writing his notes make clear to his own mind the process by which solar energy evaporating water of the sea, precipitating that water in the form of rain, acquires the means whereby it can sculpture the surface of the land. There are many other important points connected with this problem, which must be separately treated, but this conception at once simple and far-reaching, will go far to lay the foundation of his subsequent studies as to the physiographic history of the district which he is studying.

MENTAL PHILOSOPHY.

BY JOHN HABBERTON.

NUMBER TWO.

DEVELOPMENT OF THE MIND.

MENTAL philosophy has as many different departments of action as applied mechanics; the ability to think correctly is, as already indicated, not an end but a means; it is, like the blacksmith's hammer, the carpenter's saw, the engraver's chisel, or the painter's brush, merely a tool—not an example of finished work.

The best tools ever made never were of any service to their owner or to the world until they were used; on the contrary, if simply kept instead of being used to some purpose, they become in time a disgrace instead of an honor to their owner. Good tools do not imply good work, for the work depends upon the will and purpose of the man who uses them. Almost any one can recall some person regarding whom other men occasionally say, "What could not I do if I had that man's mind?" Nearly every one knows men of fine education—men of intelligent faces and noble foreheads, who nevertheless never do anything in particular. These men have good mental tools, but lack the will to use them, so they are distanced by other men, naturally their inferiors, who do the best they can with such mental equipment as they have.

Many years ago the Russian shipbuilders, stimulated by the example of Peter the Great,* built handsome ships with no tool but the ax, while the shipwrights of France and England, with all the tools that centuries of experience had developed, did no better work. Benjamin West, † the great painter, did good work with rude brushes and colors which he himself made, but West knew what he wanted to do, and determined to do it. No one

in his day had fewer facilities for learning languages than Elihu Burritt,* a Connecticut blacksmith, yet he became a wonder of linguistic acquirements. Intention and force are necessary, besides tools, if a man means to do anything.

Nevertheless, the more sincere the intention and the stronger the available force, the greater the benefit of good tools. Any one wishing to turn mental philosophy to good use, after forming an honest and distinct purpose, first, should prepare his mind for the work—he should develop his mental powers. Comparing himself with other men, he may conclude that his mental powers are too weak to be worth developing, but such a conclusion would be a mistake, even if formed by a lunatic. The resources of the human mind, like those of the soil, cannot be known until tested. Millions of acres which now yield only wild grass and worthless weeds would prove more fertile, if properly worked, than some "model farms" which are bringing their owners much praise and money. Not many years ago the great wheat and corn fields of the West, "the granary of the world," were barren wastes or noisome swamps. Some men who now are acceptably governing their fellow-beings, healing the sick, or preaching the Gospel were once loungers, gamblers, or debauchees. Their minds, like the plains and swamps of the West, have been cleansed and cultivated—been developed.

The development of the mind is therefore the first duty of a man with a desire to become a true philosopher, no matter in what direction he may wish to exert his mind—no matter whether he wishes to be a personal influence in ethics, theology, or what is called pure philosophy, he must not trust entirely

* (1672-1725.) He became the czar of Russia in 1682, his sister Sophia acting as regent until 1689 when Peter assumed full power.

† (1738-1820.) An American artist. He began portrait painting in Philadelphia when he was seventeen years old. He studied some time in Rome, and then settled in England, where he received the patronage of King George III. His best known works are "The Death of Wolfe" and "Christ Healing the Sick." With the former picture began a new era in British art, as he first represented figures clothed in costumes appropriate to their times and calling instead of in the customary classical dress.

* (1810-1879.) An American scholar and reformer known as the "learned blacksmith." While working over his anvil his mind was occupied with mathematical problems, and in the intervals of toil he devoted himself to the study of languages, in several of which both ancient and modern, he became proficient. He translated all the sagas of Iceland which related to the discovery of America. For several years he lived in England where he instituted a society known as the League of Universal Brotherhood, having for its object the abolition of war and the establishment of fraternal relations between different countries.

to good intentions, but must fit his mind to give his intentions most effect. It is quite possible to read somebody's treatise on logic, on mental, moral, or spiritual philosophy, and accept it unquestioningly, but that will not make him a philosopher—he will be merely a believer in another philosopher, who may be faulty in some respects—perhaps in all.

Some lines of reasoning, once accepted at second-hand from religious men, caused thousands of zealous souls in Europe to burn their fellow-beings at the stake; caused Saul of Tarsus to persecute the early Christians; caused millions of good-hearted Americans to insist that African slavery was a divine institution. All these awful mistakes were corrected when the many began to use their own minds instead of passively following the minds of a few.

Nearly all of the people of the United States find themselves by the ears once in four years because ten million voters accept the ideas of ten hundred—or fewer—other men, instead of thinking for themselves. During the last two presidential contests the two great parties have been very nearly balanced, in numbers; where they disagreed, one side must have been right and the other wrong. Were one-half, or one-quarter, or even one-tenth of our voters given to developing and using their minds in the spirit of honesty, such evenness of disagreement would be impossible.

The first step in the development of the mind is to use the mental powers whenever occasion offers. Information, received from wiser men, is not to be despised; indeed, it is absolutely necessary. The weak must lean upon the strong, but persistent leaning makes the weak weaker. Some statements may safely be accepted at once because their accuracy can be proved, but no statement suffers by being thought over. The early geographers taught as they believed, that the world was flat, but a few men who turned this idea over in their minds reached a contrary belief, which proved to be correct. Many systems and deductions of philosophy have been honestly taught in the same manner, but most of them have been demolished by some single individual who thought persistently about them for some time. These individuals were naturally no wiser than those whose ideas they combated, but they developed their own minds.

"Development" means a great deal when

applied to the human mind; probably the simplest definition is that development gives all the mental faculties "a fair show." When we are told that a certain tract of land has been "developed," we know at once what is meant. Unnecessary trees have been cut away so as to admit light and sunshine, underbrush has been removed, bogs have been drained, stumps extracted, and roads cut. Even then the land produces nothing of its own accord, but all of its natural advantages are made manifest, and its possibilities can be estimated.

In like manner the human mind must be developed before it can be put to its best use. Prejudices, partialities, notions, and fancies, must be got rid of. Indulgences, the bogs in which many a human mind is mired, the dense shade and underbrush that exclude the light of heaven, must be subjected to the most relentless treatment until they give place to the virtues of which they are perversions. While engaged in this uncomfortable work, any person will find encouragement as to the existence and power of some at least of his mental faculties, for the excuses which the human mind—even the mind of the commonest tramp—will make in defense of some darling fault or sin are pretty sure to show a high quality of ingenuity. A noted lawyer once said that if men's minds were as skillful for the right as they were when defending the wrong, the millenium would be upon us before we knew it.

To return to the real estate illustration, light and drainage are absolutely necessary, but roads are also made. Before anything can be brought out of a tract of land there must be ways made for getting into it. The mind must be approachable from all directions; it must be prepared to receive all desirable impressions and influences. Many which are not desirable may attempt to enter, but it is only the slothful man who does nothing because he fears "there is a lion in the way; I shall be slain."

Ignorance is no protection against mental and moral harm; if it were, that portion of Italy recently known as the Papal States would be the most virtuous land in the world, instead of the most corrupt and degraded portion of the first civilized part of Europe. Mental development—entire openness of mind that allows free entrance to all of the good thoughts and feelings that cluster about the humblest and weakest of us—is necessary

to any one who would prepare himself to think clearly and rightly. At first such a mind may find itself embarrassed, overloaded, and helpless under all that may come into it.

If the soil of a distant valley in which a new settler has "staked" a homestead claim could speak, it would tell a pitiful story: ground that never saw the light was suddenly exposed to the sun; soil on which weeds had bloomed luxuriantly for years and sown seed to produce other weeds was cleft by the sharp ploughshare that left nothing behind but an expanse of bare brown earth; thickets in which wild beasts and serpents had lurked for centuries were invaded with ax and grubbing-hoe; pools were compelled to disappear and with them the creeping things they had harbored; deep into the earth a well was sunk for living water; and everything was as it never had been before. A little later though, the soil could tell a different story: wheat grew instead of tares; the merry voices of children were heard instead of the screams of wild beasts and the hissing of snakes; where the mud had been blackest the farmers' crops grew most luxuriantly; and instead of the thickets were orchards where beautiful blossoms were succeeded by luscious fruits.

The development of the mind, like that of the soil, is a work in itself. It is a preparatory operation, but it is not to be despised or underrated on that account. Neither can it be avoided or dispensed with. All future yield is determined by the nature of the development. The Western settler who, before clearing and plowing, would go over his "quarter section," hoe in hand, dropping and covering a potato here, a few grains of corn there, and setting a rose-bush or apple-tree in the tough sod elsewhere, would be called a fool by his neighbors, and the results would prove the neighbors right. Yet men persist in attempting mental philosophy in some such manner. A fancy for some new idea or theory, or even some old one, has caused countless men to temporarily exercise their wits in ways which have brought them into contempt. The parable of the sower who scattered seed that was good enough in itself, but was dependent upon the soil on which it fell, cannot be too carefully borne in mind by any one who has a taste for mental philosophy.

From would-be philosophers who want the fruits of philosophy without giving any attention to the soil from which they spring,

come all the baleful blunders which have made philosophy a term of reproach in the world. Epicureanism, anarchism, slavery, free-love, atheism, are all perversions of philosophy, due to attempts to use the mind before developing it. Mental activity is too frequently mistaken for mental usefulness, whereas it is one of the commonest of human faults. There is a pestilent notion prevailing that to use one's mind is praiseworthy, no matter what the purpose or result may be, so long as the user does not pass the boundary lines fixed by the police. Great facility in expressing ideas, no matter how reprehensible the ideas may be, is dignified by the name of "genius," and those who hear this appellation applied to themselves imagine that they who use it must know what they are talking about. Against such use of the mind the reader must earnestly guard, for it tends in the direction of lunacy—not philosophy. It may not lead one to the asylum, but it places him in the class of people who are called "cranks." Even if he gets a good idea, the "crank" is not sure of retaining it, for his mind is not clear and receptive—it has not been developed.

Then is one never to form opinions, or adopt other men's opinions, or read treatises on mental or moral philosophy until he has what may be called a new mind? Yes; in the nature of things opinions must be formed or adopted almost every day, about the affairs of every-day life, all of which are important in their place. If a man has a work of any kind to do and only a rusty tool to do it with, he must do the best he can for the time being; but how many men are there who cannot say, on looking backward into their own lives, "Ah, if at that time I had had a better ax!" "If all my land had been developed!" "If my mind had been entirely clear!"

Beyond doubt, the best method of developing the human mind is to acquire that entire openness and honesty of heart that come through Christian belief and practice. Some men who are masters of all points of Christian doctrine are yet seriously blameworthy in action, but the clearness of heart and the love of truth of the millions to whom Christianity is a life as well as a belief make the mind peculiarly sensitive and receptive. Unbelievers of all grades have sneered at defenders of the faith who did not practice what they preached, but the veriest atheist contemplates with unalloyed respect the sim-

plest man whose longing for righteousness has really resulted in what is called a change of heart. Like good soil, which receives all seed and enables it to yield "some thirty, some sixty, some an hundred fold," the open mind, cleared of all that might prevent the good seed from striking root and growing, is susceptible to every good influence which reaches it. Nothing good is repelled or allowed to wither and die.

Without a mind in such condition, a man may think much and acutely, but so long as the tree is known by its fruit, so long will the lack of a properly developed mind result in sophisms and fallacies. Minds differ in

strength as "one star differeth from another in glory," and not every one who prepares himself to receive the good seed with gladness can be sure of equaling some of his fellow-beings in results; but so far as his capabilities go, he will bring forth only that which is good.

After the mind is properly developed comes the duty of training and controlling the mental powers, of which more hereafter; but development is first necessary, and as "the beginning is half the battle," the student is entreated to believe that not too much space and stress is given in this article to a step without which the others will be unavailing.

THE USES OF MATHEMATICS.

BY PROFESSOR A. S. HARDY, PH. D.

Of Dartmouth College.

II.

ONE of the most important uses of mathematics is to be found in the application of the Theory of Probability to the practical concerns of life; and it will be worth our while to consider this example somewhat at length, because it illustrates the nature of the service rendered by the science in all similar cases, that is, in all those cases in which the assumptions which lie at the basis of the theory are derived from experience and not from definition. Let us consider briefly the mathematical theory of probability in its application to insurance risks.

Human nature is a curious mixture of credulity and scepticism. The same man who scorns a method which pretends to predict a future event, at the same time will listen to the agent of an enterprise which promises the subscriber more than he subscribes. His scepticism arises from the fact that he does not know that the theory of probabilities rests upon that very experience which he boasts is the guide of his own conduct, and his credulity overlooks the fundamental principle of all enterprises of the nature of insurance, that "some must pay more than they receive, in order that others may receive more than they pay."

The data on which the weather predictions are founded are so variable and complex, in other words, our knowledge of all the factors

in the problem of what the weather will be to-morrow is so incomplete that the prediction is relatively unreliable. On the other hand, while we know practically nothing of the causes which determine whether a given embryo will develop into a male or a female, experience teaches us that the proportion of males to females is almost invariable, and nearly as twenty-one to twenty. That is, while nothing can be more uncertain than the sex of an unborn child, hardly any natural phenomenon is more certain than that in a large district twenty-one males will be born for every twenty females.

Notice also that in the two cases above mentioned, the prediction is not of the same kind. As to the weather, we attempt to predict a single event—the weather to-morrow; while in the question of sex, our affirmation is not of a single event but of a run of events.

The mean duration of human life is another example of knowledge founded on wide observation. The uncertainty of a single human life is proverbial. Whereas, experience teaches us that notwithstanding all the differences of constitution, and the many accidents to which human life is subject, the average length of the lives of a large number in the same community is so very nearly the same that financial risks depending upon it are classed among legitimate business enterprises instead of among speculations.

Like illustrations are afforded by all statistical inquiries. The number of crimes of the same kind committed in a year, the ratio of convictions to acquittals in jury trials, the number of conflagrations, of ships lost in a particular trade, etc., all fluctuate within narrow limits, but all approach fixed values as the range of observation is more extended. *A priori* we know nothing of the probabilities of these things,—very little of the causes which determine the special event. We infer from large experience; the wider the experience, the safer the inference, and our confidence in the inference rests upon our belief in the constancy of the operation of the laws of nature,—laws whose results we observe, although perhaps ignorant of the laws themselves.

In respect to the mathematical theory of probability, then, we must forego the idea that pure chance presides over the sequence of events; for the theory implies causation, order, law, providence, or whatever you please to name the very opposite of pure chance; and the law (or laws) on which it thus rests is an empirical one, that is, a law derived from observation—a law, moreover, which is observed to hold good only for large numbers; the greater the number the safer the application of the law; and thus the theory is able to predict *nothing* about a single event, but, very accurately about a large number. So much for the fundamental basis of the theory; it rests on experience and applies only to a general run of events, not to a particular event; and is trustworthy in proportion as the experience on which it relies has a wide range. A few words now on the special nomenclature of which the theory makes use.

In nature no such thing as a straight line or circle exists. When, therefore, the geometer wishes to prove the relations which hold good for circles and straight-sided figures, he is obliged to idealize. There is no such plane, for example, as a plane without thickness. But the geometer is at liberty to neglect the third dimension—thickness—and reason about two, length and breadth. So doing he obtains a plane geometry. But no statement of this plane geometry is true of any of the figures which we draw to illustrate it; being in fact true only for the ideal figures which we conceive of in the mind. Geometry tells us an acre contains 43,560 square feet. But this is true of no such acre as we survey in the field with our nicest in-

struments. Such an acre contains the 43,560 square feet of the ideal acre only as it is its exact reproduction. But the exact reproduction is an impossibility; hence the statement of the number of square feet in any actually surveyed plot of ground is an approximation.

Now in the mathematical theory of probabilities we do just as the geometer does. We first take ideal cases and frame ideal laws, or theorems, like those of geometry. We then apply these to actual cases, cases which all ways differ more or less from the ideal ones, and hence these applications are always more or less approximative. The only question is, are they sufficiently exact for practical purposes? Let us take the case of a coin tossed in the air. When it falls, either a head or a tail *must* be uttermost; and just as the geometer, in beginning a demonstration, says, "Let this be a circle," i. e., suppose this to be a circle, so we suppose an ideal case, namely, that the conditions which determine whether the coin falls with its head or tail uppermost are such as to render either event equally probable. Then whatever symbol is to represent the chance of a head will also represent that of a tail. What shall this symbol be? It must evidently express the magnitude of the chance; it is a question of *more or less*, i. e., of measurement, the chances being, in the supposed case, equal, and therefore the measure the same.

Now measurement implies a unit. To measure a probability we must have a unit or standard, just as to measure a distance we must have a unit of length; and the one essential quality of a unit is invariableness. A yard stick which is continually changing its length is of no value. Our unit then must be constant. Such a unit is *certainly*. What this is we all understand, and certainty is our unit of probability; so that if unity expresses certainty, a probability will be a fractional part of unity. Thus, in the case of the coin, the chance of a head is $\frac{1}{2}$, of a tail is $\frac{1}{2}$, and $\frac{1}{2} + \frac{1}{2} = 1$; that is, either a head or a tail *must* turn up, and we have the sum of the probabilities equal to unity, or certainty, as it should be. Take another ideal case. Seven black balls and three white balls are in an urn, and each is equally liable to be drawn. Then the probability of drawing a black ball is $\frac{7}{10}$, and of drawing a white one is $\frac{3}{10}$, and $\frac{7}{10} + \frac{3}{10} = 1$, or we are certain to draw

either a black ball or a white one. We

see, then, that the measure of the probability of the happening of an event "is expressed by the fraction that the number of favorable cases is to all that can happen."

Now take our ideal case into practice. In practice the chances of a head or a tail in a single throw are *not* equal. There are a multitude of conditions determining how the coin is to fall, about which we have no knowledge, and over which we have no control. They may be such that the head falls uppermost several times in succession, so that our mathematical statement that the probability of a tail is $\frac{1}{2}$ seems good for nothing. Here enters experience. As a matter of fact, we find that in spite of all these varying conditions under which the coin falls, and our ignorance of them, *in the long run* it falls on one side about as often as on the other, or that in many trials the conditions tend to equality. In short, experience teaches us that while our statement of an equal number of heads and tails in six throws is of little value, in one hundred it is of more value; and while that for no definite number of trials, however great, can we predict what the result will be, we can make general statements which actual trial will in the long run justify, and which like general principles in other matters are in the long run safe rules to follow. So is it with the balls. In ten trials we should rarely get seven black and three white ones. Indeed the probability would be very great against it. But in one thousand trials the proportion of the number of black to white balls would be nearly as seven to three. Why? Because experience so teaches us.

This case is identical with the number of deaths under forty years of age in every thousand. In a single case we can hazard no prediction, in a million we can stake our wealth with security, as in fact we do. Again, why? Because law of some kind or other presides over the variable conditions of practice, and long experience has given us faith in the constant operation of this law. We may apply the ideal laws of probability to practical problems provided we deal with a large number of events and not single ones. Just as in the case of an engine provided with a large fly-wheel, or a water-supply system which has a large distributing reservoir, the sudden demands on the part of a consumer of energy or water has no appreciable effect on the velocity of the wheel or the level of the reservoir; so the individual exception to the

mortality-law has no visible effect upon it. Large numbers are the fly-wheels of the doctrine of probabilities.

De Morgan* in his celebrated exposition of this subject remarks that the distrust of the theory of probabilities entertained by those who do not understand it, is due to the fact that it seems to assume a power of prophecy and to be of no use unless it does. This, he adds, is both true and false. There is prophecy, but not of particular events, and this power of prophecy is derived from experience, not from inspiration. It is of the same *kind* as that of the astronomer who predicts the time of a star's passage over the meridian to a fraction of a second, the difference being one of *degree*—the events with which the astronomer deals being controlled by laws of which his knowledge is so accurate that he is dealing with probabilities upon which he may place an almost absolute reliance. As an example, suppose that of twenty ships engaged in a particular trade, on the average one is found to be lost every five years. If the average value of a ship and its cargo is \$50,000, this means that one of the twenty owners is almost certain to lose this sum in five years. The law—providence—whatever we may call it, implied by this steady loss of one ship in twenty, every five years, has no compassion, never relents. It does not distribute the loss among the twenty owners; it pounces upon one. It does not select the owner best able to bear this loss; it is as liable to select one whose whole capital is involved as any other. As a further illustration, suppose fifty men sit down to a dinner costing \$5 a plate. If the landlord were to insist that one of them, selected by lot, should pay the whole \$250, he might find a precedent for his conduct in the laws of nature. It is under such a law that the ship-owners engage in trade. Certainly as one of the fifty you would prefer to pay \$5.25, or even \$6, rather than to run the risk of having to pay \$250. Suppose, further, that I, an outsider, assume your risk for a consideration of \$6. If the lot falls on me I have lost \$244 where you would have lost \$245. But if I make this buying up of risks my business, and buy up at \$6 the risks of the entire party, then I am held for the bill, pay it, and make a profit of \$50. This is insurance. What is its safety? The certainty of the knowledge of the sum to be paid, that is, the cost of the

*Augustus. (1806-1871.) An English mathematician.

entire dinner, or, in the case of the ships, the truth of the induction from experience that one ship in twenty is lost every five years. Any doubt on this point converts the safe business into the rash speculation. What renders insurance feasible? Individual unwillingness to incur risk of loss. You are unwilling to stand the chances of being held by lottery for the cost of the entire dinner, so that my profit depends upon your unwillingness to gamble, on the disadvantage which led you to pay \$6 to be free from the caprices of fortune. For however impartial with respect to masses, fortune is not to be depended upon by the individual.

The enormous sums invested in insurance and the magnitude of the interests involved, present a notable illustration of the indebtedness of society to mathematics. The results furnished by the theory of probability are rigorous consequences of certain hypotheses originating in experience, consequences which follow as inevitably as those derived

from Euclid's axioms. So long as we make no application of these results to the sensible world of experience, they constitute with the premises a system of formal truth, that is a system self-consistent in all its parts. Given this, that follows. The applicability of these results to practical life is, of course, dependent upon the premises. Any doubt which rests upon the latter also attaches to the former, for the inferring process which lies between the data and the conclusion cannot eliminate the imperfections of the data. As our experiences become many and uniform they acquire a very high validity as data, and the inferences drawn from them have a correspondingly high scientific value, but their only warrant is experience and they cannot rise above their source. The service here rendered by mathematics consists in the brevity, rapidity, and certainty with which it reaches the conclusion, and the only distrust to be entertained is that which we feel in respect to all reasoning founded upon human experience.

TRAITS OF HUMAN NATURE.

BY J. M. BUCKLEY, LL. D.

I.—UNIVERSAL.

POPE* says, "*The proper study of mankind is man.*" Whatever controversy might arise concerning the truth of that assertion would begin upon the first word. All reasonable beings must admit that a proper study of mankind and one of the most important, is man. Religion requires and directs the study of God, who made man, without a knowledge of whose purpose man cannot understand himself, forecast his destiny, or adopt reasonable rules of life. Nature and philosophy derive their interest and importance, as studies, from the relation which man sustains to the universe in which he lives and to the laws which govern it. Even religion derives its primary interest from the comprehension of his relations to God, to his fellow-man, and to eternity.

A writer in the *Spectator*† says, "Human nature I always thought the most useful object of human reason"; and informs us

that he esteemed the making of the consideration of it pleasant and entertaining to be "the best employment of human wit." According to tradition, the oracle pronounced Socrates* the wisest of all men then living, "because he judiciously made choice of human nature for the object of his thoughts."

In this paper I shall treat the *genus* human nature—the characteristic common to every "kindred, tribe, and tongue."

THE PHYSICAL MAN is a "biped, without feathers," Diogenes† sarcasm upon Plato's definition to the contrary notwithstanding. He walks erect, and is distinguished from other inhabitants of the earth by various particulars. A philosophical writer has affirmed that he is chiefly differentiated from other animals by "the superior development of the anterior portion of the spinal cord," which was

* (About 470-399 B. C.) The great founder of Grecian philosophy.

† Laertius. A Greek author who lived probably in the second century, A. D. "Plato having defined man to be a two-legged animal without feathers, he (Diogenes) plucked a cock, and, bringing him into school, said, 'Here is Plato's man.' From which there was added to the definition, 'with broad flat nails.'"—*Life of Diogenes.*

* Alexander. (1688-1744.) The popular English poet. This famous line occurs in his "Essay on Man."

† A periodical published by Richard Steele, to which Addison was a regular contributor.

translated into simple language by a teacher : "that is, he has a larger front head." His eyes, ears, and hands are two ; his mouth and nose one each ; his fingers and toes five on each foot and each hand. Monsters have been born with less or more than the normal number of eyes and other organs or members, and some destitute, but they are not to be considered in the treatment of the *genus homo*.

Idiots sometimes resemble beasts rather than men, and various tribes not idiotic live in such a way that the civilized traveler meeting a single specimen might long be in doubt whether what he saw was man or beast. Speaking generally, in every clime, on sea or land, in health or sickness, man is able at first sight to distinguish man from beast, whether among the pigmy tribes in equatorial Africa, the Bedouins of Sahara, the misshapen Esquimaux, the deformed flat-headed Indians, the Patagonian giants, the tallest race on the globe, with a mean height of five feet eleven inches, or a cluster of dudes at a watering-place. If the missing link were living and could "a tale unfold," it would greatly complicate the discussion and require an accurate list of infallible tests.

The sciences of anatomy and physiology, branches of the broader science anthropology, contain the accumulated knowledge of mankind concerning the physical man and exhibit to the student, organs, adaptations, and laws of growth, development, nutrition, and decay. When pursued in connection with comparative anatomy and physiology, they reveal numerous distinctions which enable an expert with infallible accuracy, by the examination of the fragment of bone, the analysis of a drop of blood, or the microscopic examination of a section of the brain, in many cases to distinguish the human body from the other animals.

THE INTELLECTUAL MAN.—The established senses relating the outer world to the mind through the body are common to man. No normal human being is without them, nor is any man endowed with a sense peculiar to himself,—though the greater sensitiveness of one or more senses of particular individuals has led some to conclude the existence of a special sense. Certain philosophers affirm a sixth and a few a seventh, but these are predicated of all men ; and thus far their hypotheses have not commanded general assent. The intellect is the same, as to the functions of its various faculties, wherever man is found,—

the memory in the two forms of remembrance, spontaneous and recollections intentional, both a conservative and reproductive faculty ; the imagination, the representative faculty ; and reason whereby effects are deduced from causes or traced to them, comparisons made, all objective truth not reported by the senses comprehended, and all sensations tested and intuitions rationally accepted. These faculties may be stronger in one than in another, and mental force as a whole may differ greatly in different individuals of the same race and in different races ; but reason, memory, and imagination are of the same nature and perform the same intellectual work more or less efficiently wherever they exist. The will—a term incapable of definition or explanation, but whose function is known and felt by every being possessing it—unites all the faculties of man in a common center, transforming what otherwise would be a mob of uncontrollable passions excited by a multitude of incoherent ideas, into an army more or less subject according to the degree of volitional power and discipline to the control of a commander-in-chief. The Hottentot exhibits the possession of all these faculties as really, though not in the same degree, as the most perfectly trained and accomplished Christian scholar.

THE MORAL NATURE.—It is impossible to conceive the idea of man except as a union of three natures in one, and they blend on invisible lines. The appetites, passions, and instincts, and the emotional and moral susceptibilities are essential parts of the hereditary endowment of the race. Like the faculties of the intellect they may differ in degree but are found to some extent in every normal human being. Most of the propensities, appetites, and instincts are branches of two which are fundamental—the instinct of self-preservation and the impulse upon which the perpetuation of the human race upon the earth depends.

Hunger and thirst lead all men to partake of food ; the knowledge attained by experience of the importance of food leads to its accumulation ; the vicissitudes of heat and cold render necessary shelter, clothing, and modifications thereof ; the pleasures to be derived through the senses make both comfort and luxury possible ; while nature has "committed to the passions the perpetuation of the race," and anger roused by insult or assault prepares the subject thereof for self-defense, while fear

prompts to a speedy escape from recognized danger.

Veneration, gratitude, benevolence, filial, conjugal, and parental duty spring naturally from the moral sentiments common to mankind, and the universal sense of the race regards those who are destitute of them, or who under the influence of selfishness resist them, as moral monsters. Conscience, distinguishing actions into right and wrong, summons reason to repress the excesses of passion, to guide the instincts, to moderate the appetites, and to direct the conduct by those principles which are accepted as binding. "All passions are in all men, but all appear not in all."

A close observation of mankind finds all races and all men essentially the same. The generalization, however, is of necessity so wide that a logical method cannot be closely followed; yet considerations may be offered which are equivalent in force to positive proof.

There is in human beings a *predominant love of self*, which may take the form of pride, ambition, lust of wealth, or lust of power. What if

"Lowliness is young ambition's ladder,

Whereto the climber upward turns his face;
But when he once attains the utmost round,

He then unto the ladder turns his back,
Looks in the clouds, scorning the base degrees

By which he did ascend?"

Or what if ambition takes the form of idle isolation, holding itself aloof from work?

What if it sets itself against all that is,

"Spurning all wholesome curb and dreaming free

Her rabble rule licentious tyranny?"

It rules, except as restrained by reason or religion in every human breast, the first quality that manifests itself, and the last that dies.

Macaulay* says, "One man goes without a dinner that he may add a shilling to one hundred thousand pounds; another runs in debt to give balls and masquerades; one man cuts his father's throat to get possession of his old clothes; another hazards his own life to save that of an enemy; one man volunteers

on a forlorn hope; another is drummed out of a regiment for cowardice. Each of these men, no doubt, has acted from self interest."

Akin to this is *opposition to restraint*. No vigorous nature was ever otherwise than self-willed. Because man is related to the whole external universe through the senses, and because reason and conscience unfold more slowly, all love sensuous ease and pleasure, and are given to sensuality where reason and religion through instruction, good example, and external environment have neither diverted attention from the passions nor made their gratification impossible.

An almost *ineradicable complacency* exists in human beings the world over, sometimes apparently, and only apparently, counter-worked by diffidence. Its most common form is vanity, and it is usually accompanied by self-deception. Many persons fancy themselves beautiful who are not so regarded by others and are not so by any known standard. Others suppose themselves accomplished who are objects of merriment both to the judicious and to "the groundlings" whenever they display their vaunted accomplishments. Burns* familiar words,

"O wad some power the giftie gie us,

To see ourself as others see us,"

state this fact in popular form.

No radical difference in these respects can be seen between the heathen woman, the uneducated servant girl, or the leaders of the fashionable or literary world; nor should many who have been held in honor as saints be excepted from this statement. Not far beneath the exterior aspect of humility is seen a complacency which is fed by the applause which it deprecates and depreciates; and philosophers, stoics, mystics, and epicureans alike exhibit the pre-eminently human quality of vanity.

It may be doubted whether the monstrously exaggerated representations in the tombs and monuments of ancient Egypt necessarily imply a greater degree of vanity than is possessed and exhibited to the discerning by the kings, generals, sages, and orators of the modern world. This subtle complacency divides the world into cliques which are "mutual admiration societies." It has much influence upon the division of the Christian church into sects, and is more potent in their perpetuation than any other influence; and

*Thomas Babington. (1800-1859.) A great English scholar, critic, and historian. His most important work is his "History of England," of which it has been said that it was read by tens of thousands with as much interest and delight as a fresh novel from Scott or Bulwer would have been.

* Robert. (1759-1796.) The celebrated Scotch poet.

the most fashionable society does not exhibit the spirit more unmistakably than religious assemblies with their contentions, flatteries, dignities, and titles.

Human nature everywhere has a *capability of becoming insensible*, which is found in every department. The physical system may learn not only to endure without pain, but to derive pleasure from what at first was intolerable. The foulest odors may be no longer perceived; the most beautiful scenery may be unobserved; the most discordant noise and the most abhorrent spectacles may become tolerable. A mind originally elevated may deteriorate and even lose the power to distinguish the pure and the good.

I am not seeking to teach a religious doctrine or to affirm a universal disrelish of spiritual things, an entire absorption in the things of this world and an aversion to the service of God. These belong to the sphere of the religious teacher. Of spiritual things man originally knows nothing, and it is possible to conceive a race living without thought of God or of anything higher than what man learns by experience and observation. Under all religions, or none, the mutations of joy and sorrow, and of hope and fear, are much the same. Men everywhere are striving for property, power, pleasure, knowledge, ease; their interests center in their homes, possessions, health, friends, country, and religion. And in all these, whether they live according to law, contrary to law, or without law, they show essentially the same natures.

Thus far assertions only have been made, and while these may rest upon the experience of each man, there are proofs of convincing force to offer of their truth.

This identity of human nature can alone explain the *similarity of history*. The pursuits and occupations of men in different countries and ages are so nearly the same as to produce a scene superficially diversified and excited, but really monotonous. If we study carefully the rise, progress, and the decline and fall of nations, the result is the perception that while languages, names, and manners are different, passions and propensities are the same. Ambition, avarice, and lust are the passions which have ruined the mightiest nations which have ever existed. Surprisingly accurate parallels can be drawn between the empires and republics of the ancient world and those of to-day. Costumes and scenes differ, but motives appear the same. So that a mere change of

names and substitution of different weapons of war would in many instances adapt ancient historical writings to the description of modern events.

The similarity of the *proverbs* of all nations is explained in the same way. These have been laboriously gathered together and form collections in which many thousands from every people may be consulted and compared, and when the comparison is completed, a proverb which was old in the time of Solomon is abundantly confirmed—"as in water face answereth to face; so doth the heart of man to man."

The *poetry* of all nations affords further proof. Ample means of comparing it exist in our age; whether we read the classic poetry of Greece and Rome, study Homer and Anacreon,* or the few fragments of Menander† that remain, Virgil‡ or Horace, or read that of later times, we find that only that retains a hold upon the world which reflects the common elements of human nature. There have been marked instances of reaching all classes, learned and ignorant, high and low. Shakspeare declares that he only who "holds the mirror up to nature," can move human hearts. And he tells us, too, that "one touch of nature makes the whole world kin," a thing impossible if human nature itself were not in substance identical.

Addison, in the *Spectator*, says, "When I travel I take a particular delight in hearing the songs and fables that have come from father to son and are most in vogue among the common people of the countries through which I pass; for it is impossible that anything should be universally tasted and approved by a multitude, although they are only the rabble of a nation, which has not in it some peculiar aptness to please and gratify the mind of man. Human nature is the same in all reasonable creatures, and whoever falls in with it will meet with admirers among readers of all qualities and conditions."

So we are told that Molière|| used to read all his comedies to an old woman who was his housekeeper, as she sat by him at her work in the chimney corner, "and could foretell the success of his play in the theater by the re-

* A Greek lyric poet who lived about the sixth century, B. C.

† (About 342-291 B. C.) A Greek dramatic poet.

‡ See "Latin Courses in English" p. 132 et seq.

|| Jean Baptiste Poquelin. (1622-1673.) A famous French comic author and actor.

ception it might have at his fireside, for he tells us the audience always followed the old woman and never failed to laugh in the same place." Addison further states that it is for this reason that Homer, Virgil, or Milton, so far as the language of their poems is understood, will please the reader of plain common sense.

It is attempted to show in this paper only that human nature, to quote Whately* in his

*Richard. (1787-1863.) Archbishop of Dublin, an English scholar and writer. He is considered one of the founders of the Broad Church party. He is widely known through two books, "Elements of Rhetoric" and "Elements of Logic." He is the author of numerous religious and educational works.

notes on Bacon's* essay on "Nature in Man," "is always and everywhere in the most important points substantially the same." If this be true the best preparation for the study of human nature is *introspection*. Those who know their own hearts are sometimes supposed when they speak to have had special information and to intend an improper personal reference.

Judging other men by ourselves is safe under certain limitations. Those limitations will be treated in succeeding articles.

*Francis. (1561-1626.) An illustrious English philosopher.

WHAT SHALL THE STATE DO FOR ME?

BY THOMAS B. PRESTON.

IF I were asked the question, "What shall the state do for me?" my first impulse would be to reply, "Let me alone. I ask nothing from the state. I want no interference. I want absolute freedom to think as I please, to speak as I please, to do as I please. I want to buy or sell where I feel like it and when I feel like it and whatever suits my fancy. I want no paternal government regulating my food or drink or clothing or education or business pursuits. I want to be my own government, a law unto myself. I want no superior. I want power and influence. I want to own wealth, culture, lands, men,"—

"But, hold on!" some one would say; "what kind of a world would it be if all were possessed of such insatiate desires?"

But is not that democracy? Is it not liberty? Should I not be allowed to do what I please with my own, with whatever I can acquire by my labor? After all, why should the state do anything for me?

It is evident in the first place that the gratification of man's desires must be limited, if only by his physical powers. It is the Infinite Being alone whose will is a law unto Himself. Besides, the wants of some individuals may conflict with the wants of other individuals and, in these cases at least, there must certainly be a limit. The prevention of this clash of interests cannot be left in the hands of the parties concerned but must be the care of the state. Without it the world would revert to a condition of barbarism and savagery. Hence the state must at least do

this for me: see to it that my liberty is not infringed by others and conversely that I do not interfere with others' freedom.

Some scientists indeed recognize no abstract rights in man. A distinguished professor has recently stated that man has no more rights than a rattlesnake. Mr. Huxley* declares that we are born into this world "small reddish persons" with no discernible abstract or concrete rights of any description beyond those we can establish by competition with our fellows. But the philosophy of these gentlemen, however profound they may be in their own field of investigation, certainly seems narrow and one-sided when carried into the domain of ethics. "You must struggle against others," they say, "and that you may have more, others must have less. Make your own way, like a blade of grass or the mountain torrent or, if you have genius, like the bolt of lightning. Your desires need only be limited by physical laws, but these set impassable bounds." To these professors man is merely an animal of a more delicate construction than the rest of animate creation. From their purely material point of view, man, as an animal, has no more rights than any other, and from this standpoint they are presumably correct. Their science deals only with physical laws and, if

*Thomas Henry, F. R. S. (1825 —.) An eminent English naturalist. In his early days he was a surgeon in the royal navy. He is a prolific writer and a popular lecturer on natural science. He favors the Darwinian theory of evolution.

those laws alone govern man, he is entitled to no more than he can grab and may retain all that he can acquire by superior strength or skill or craft, however applied.

Religion—that is, the religion that is for the most part preached in the churches—in many instances takes the opposite view. Its teachers overlook man's physical wants. "What rights," they argue, "can be claimed by this clod of earth, so fallible and so vain? You speak of power, wealth, authority. Do you not know that all power is from God? Men do not deserve power. This talk of rights is a fallacy. Things as they are, are of divine ordination. To question the present order would be subversive of society. You should never seek to gratify your desires. This world is a place of probation. Suffering should be sought for its own sake. The more you suffer here, the more you will enjoy hereafter. Leave the things of this world to those who crave them." These teachers treat only of the soul, seeming almost to forget the needs of the body.

Between these two extremes the minds of men, searching for truth, have wandered for ages. In the effort to solve the problem a perpetual conflict seems to have arisen between the individual and society, leading some to condemn all kinds of government and social progress, and others to sink the individual in the state. Is there no middle ground, no true solution? Are there not some certain principles which clearly and broadly mark out the lines of personal freedom and show where that freedom is necessarily limited in its sphere?

The difficulty lies in the fact that with almost every truth enunciated by human authority there is some admixture of error. If one's own aspirations for freedom are in themselves wrong, the cry for liberty which has sounded through the ages is a mockery and the very nature of the human mind is a snare unto itself. Yet it is plain that the scientist is correct in stating that our desires must be limited by physical laws, and most people will concede that the religionist is telling the truth when he says that all power is from God. But the former too frequently ignores the action of moral laws, while there are now and then those of the latter class who dogmatically assert that science and progress are opposed to religion. The impossibility of the unlimited fruition of unlimited desires must be conceded. There

must be limits, moral as well as physical. Apart from the consideration of each man's duties to himself, which form the proper subject for his own conscience, how shall the state so arrange matters as to preserve the freedom of all without interfering with the liberty of each?

Here there is another difficulty. Government is not a science, it is an experiment. And in the nature of things as society advances, new problems arise to be solved, new perils to be avoided. This flows from the variable nature of man's wants and the variable means of supplying them, so that no individual course can be predicated with certainty apart from the circumstances which surround it. Hence the codes of statecraft must be constantly changing to suit the progress of human society. What was wrong at one stage of the world's history, or would have entailed great hardship, becomes right at another period and a means of extending the blessings of civilization. In this diversity of conditions is there no principle, fixed in itself, but variable in its application?

Individual liberty must be conceded as the first step. No one has a right to abridge it. What is this liberty? By the very fact of birth we prove our natural right to live. Otherwise nature enacts a lie. And this right to life is equal among all the children of men. From the right to life flows also the natural right to work out the end of our existence, which some men mistakenly seek in animal pleasures, and others gloriously follow in obeying the promptings of their better nature, but which all men call the pursuit of happiness. Hence it was not only a determination of the sphere of government, but an enunciation of a fundamental principle of ethics and a profound religious profession when our forefathers in their magnificent Declaration of Independence asserted that all men are created equal, that they are endowed by their Creator with certain unalienable rights, that among these are life, liberty, and the pursuit of happiness.

The state should see to it that no individual interferes with another's life, with his power to speak or to act or with his pursuit of happiness. This is the source of the police power of the state, one of the earliest functions assumed by every community. And as the state owes to all its citizens collectively what it owes to each one, it must also see that their life, liberty, and pursuit of happiness are not

abridged by citizens of other states. Thence come the right of defense and the power to maintain an army and navy. Moreover, the right to life, liberty, and the pursuit of happiness is unalienable. It cannot be bartered away or sold away or given away, much less stolen away. No man can own another. Slavery is a crime against nature and it is the duty of the state to abolish it wherever it exists. Equal natural rights are the first principle applicable to government of the state.

This is but another way of saying that the state shall prevent the private rights of some from interfering with the private rights of others. While it is true that society owes no man a living, it is equally true that a just society should see to it that every individual has a chance to make a living for himself to the extent that the means exist. On a desert island, society, represented by a shipwrecked crew, might find it impossible to afford access to such means, because they do not exist. But on this island of a world, floating through space, teeming with a superabundance of all things capable of sustaining life and educating the higher faculties, where nature responds so kindly to every effort of the human mind, there is certainly enough and to spare for every individual that may be born into it. If the individual is wicked or lazy and will not exert his faculties to obtain the means of living, he deserves no sympathy. But such is not human nature. Man naturally seeks to acquire things with the least expenditure of time and labor, but that is a very different thing from saying that he would rather starve than work. And if there be such a man, he should be left to starve. The state should see to it that equal natural rights are secured.

A corollary of this is that equal natural opportunities should be maintained. Now natural opportunities are not equal if some members of the race are permitted to charge less fortunate fellow-beings for their use. To be equal these opportunities must be absolutely free or their value for use must not be allowed to accrue to the benefit of private individuals. With the air or the water, for instance, which are of such a physical character that their use by one does not preclude their use by another, their very nature makes them absolutely free.

Land may be possessed and used in common and substantial equality be secured, such as is found among the Indian tribes. But the

whole experience of the world has shown that such common possession of land works against individual improvement, against progress, against civilization. It is worth while to consider whether equal opportunity here may be secured in a better way by the state retaining for the whole people the annual value for use of the land, leaving actual possession undisturbed as an inducement for individuals to improve it. Then no one would hold more land than he wished to use and men would be free to apply themselves directly to the land, the chief object of all labor. This would relieve competition and act as a balance-wheel, so that when competition between workers became too strong, those displaced could always make natural wages by direct application to land. If competition should slacken, men would turn from the land to more profitable occupations. Of course this does not imply any confiscation of improvements or products made by the individual. Those are his own as against all the world, and for the state to take any portion of them in taxation or otherwise is simply robbery. The state, then, should maintain equal natural opportunities. It should never permit any monopoly of the bounties of nature.

Furthermore, it should never permit any other unlimited monopoly. In the case of a patent the monopoly granted an inventor is considered as a reward for his intelligence and an incentive to further discoveries. But it is very limited both in duration and application and probably does not amount to more than the invention really is worth were there no patent and the state rewarded the inventor with a magnificent and well-deserved fortune instead, which, perhaps, after all, would be a better way. It is different, however, with the perpetual monopoly of the means of transportation and the medium of exchange. Such monopolies seriously affect man's natural right to produce things, for things are not produced, in the economic sense, until they reach the consumer. Transportation and the medium of exchange—money—necessarily are becoming functions of the modern state. To retain individual liberty it is necessary that the state should assume all those functions which if left to individuals would gravitate into monopolies through which these individuals could interfere with the freedom of their neighbors. Hence, state franchises for postal service, railways, and telegraphs, or municipal franchises for water or gas, should never

be given away, or, if given away, should be resumed. Experience has shown that state supervision of these agencies is productive of corruption and that state ownership is the only means of preventing monopoly by individuals. Monopoly in them there must be from their very nature. The only possible way, therefore, to preserve individual liberty is that the state, the people collectively, should be the monopolist rather than any one man or set of men.

In assuming these functions should the state make compensation to present owners? Certainly there should be compensation for the plant and improvements, but none for the franchise unless something was paid for it to the state and in that case only what was originally paid. It would be unjust to the indi-

viduals who have made improvements, to refuse them compensation, but the compensation should be for the improvements in their now existing condition.

Now I begin to see that the ideal state should do many things for me and for all my fellow-beings as well. It must maintain a police, an army, and a navy—at least in the present condition of society—it must prevent any one from enslaving me and see to it that I am free to apply myself to natural opportunities, to travel, to send letters or intelligence, to trade freely the world over, to pay no tribute to any man for anything which he has not produced by his labor or capital; and, conversely, it must not allow me to charge other men for things which I have not produced by my labor or capital.

End of Required Reading for November.

NIRVANA THE BLEST.

BY HJALMAR HJORTH BOYESEN.

WHEN earth and sea are sleeping
And the pulse of life throbs low;
When with hushed and rhythmic murmur
The tides of being flow
And cloud-isles enchanted hover
In the evening's golden glow,

Methinks I sink with rapture—
A rapture, veiled and intense,—
Into an infinite ocean,
Engulfing both soul and sense,
With a deep luxurious oblivion
Of why and whither and whence.

The dust of extinct creations,
A thousand times born and dead,
Of myriad generations
That suffered, slew, and bled,
And blindly fought God's battles
In misery, sin, and dread—

In subtler alchemy blended
Now throbs in this aching brain,
And speeds the tumultuous torrent
That seethes within each vein,
And deep in my heart's dark chambers
It feeds the dim lamp of pain.

Ah, hoary the burden of ages,
The curse of the ancient night!
Thro' the vastness of space I am whirling,
Mid the dizzying spheres of light,
And the stormy tides of creation
Arising and sinking from sight.

Lo, hoary at birth and weary,
And heir to the world's long woe,
I cry through the murky abysses,
Where wandering planets glow.
And my voice with hollow resounding
Re-echoes above and below.

O God, O why hast Thou kindled
This passing fever of life—
These flaming thoughts that wrestle
And writhe in eternal strife—
This fury of fret and ferment,
And wars of tongue and knife?

Nay rather in sleep and silence
Enshrined, I fain would rest
In deep, inexhaustible slumber
On Nature's ample breast,
And swoon in the dusk of the evening
Into Nirvana the blest.

ENGLISH POETS OF TO-DAY.*

BY PROF. W. M. BASKERVILL, A. M., Ph. D.

Of Vanderbilt University.

IN its literature the Age of Victoria will doubtless stand forth as distinct as either that of Anne or that of Elizabeth. No other age of the world was just like it. Like the Alexandrian Age of Greek literature it has been reflective, critical, and scholarly, rather than creative; but it has also been a vast deal more. Constitutional and parliamentary government has for the first time been given a fair trial. Practical invention has been extraordinarily developed. Land, air, and sea have been put under contribution to rapid travel and quick interchange of thoughts. Social order and political and philosophic thought have been revolutionized. The poet and the preacher have been rudely jostled by the man of science. A new fact or a new discovery has been more eagerly sought after, more heartily welcomed, and more liberally rewarded than a new poem or a new essay. For such an age there must needs be a distinctive literature.

But when one begins to reflect upon the literature of one's own time it is not so easy a task to pick out the leaders. At times a Von Moltke and a Boulanger get strangely confused in men's minds. We are too near to get the right perspective. Popularity is no test. Contemporary criticism is almost worthless. Moreover, the age has been remarkably prolific of poets, novelists, historians, biographers, and essayists—to which kinds of writers this short series of papers is restricted. Their name is legion; for nowadays everybody writes and writes well. Hence it need surprise no one to find some of his favorites missing in the selection which is here presented.

At the head of English men of letters stands Alfred Tennyson. Not only among English-speaking people but also on the continent of Europe there is no living figure approaching that of Tennyson in literary dignity. In combined length and distinction English literature offers no parallel to his career. When he began writing nearly seventy years ago his verses gave tokens of Byron's ascendancy,

but he soon showed signs of reading Shelley and then passed under Keats' influence. "Horace was my master," Mr. Edmund Gosse once heard him say, "Horace—and Keats." Alas! "it was little Horace and not big Homer who set such high value on the details of verse-making." Hence in studying Tennyson's poetry we again and again come near making the fatal mistake of taking him for a master architect rather than a poet. For by common consent he is not only the first man-of-letters, but also the representative poet of his time. In what does this pre-eminence consist? Certainly not in productivity, for therein he has been surpassed by both Browning and Swinburne. Nor does it lie in mere intellectual capacity or attainment. As Mr. Gosse has well said, "He has not headed a single moral reform nor inaugurated a single revolution of opinion; he has never pointed the way to undiscovered regions of thought; he has never stood on tip-toe to describe new worlds that his fellows were not tall enough to discover ahead." In what then does his greatness consist? The time has not come for the final estimate of his work, but many reasons can be given for the place he holds in relation to his age. Realizing from the first that poetry is an art and chief of fine arts, an art demanding toil as well as inspiration, he excelled in the painstaking finish of verse, while giving exquisite delight by means of his subtle fancies and graceful imagery.

In 1842 "he established his claim as a poet remarkable for variety and excellence, remarkable for method and manner, and remarkable for the perfection of his art." Furthermore his poetry has given artistic and memorable expression to the thoughts and hopes and doubts of his contemporaries. He has understood the times. Science changed the world. He adapted his poetry to its perfectest knowledge. Classicism and romanticism were the delights of the age. He gave to the world "Ænone," "The Lotus-Eaters," and "The Idylls of the King." Woman was winning a new place for herself. He filled a gallery with the rarest portraits of

*Special Course for C. L. S. C. Graduates.

her sex. Religion was rapidly extending its sway over men's hearts and purity of life was demanded. He lived a life of the purest Christian faith and embodied its noblest teachings in "In Memoriam." The brotherhood of man became the watchword of the age. The poet taught that the individual withers, but the race is more and more. The English language was beginning to be studied and appreciated as never before. He expended the treasures of his native intellect in broadening and deepening his own hold upon the language, became the enemy of slang and affectation, and the restorer and purifier of our tongue. Living in an age in nowise remarkable for poetic fervor or lofty and inspired imagination he became a composite and idyllic poet excelling in the purity of his speech, the chastity of his style, the various perfection of his writing, and in the perception and representation of human character.

"Oh singer of the knightly days of old !

Oh singer of the knell to lust and hate !

Oh bringer of new hope from memory's shrine !

When God doth set in Heaven thy harp of gold,

The souls that made this generation great
Shall own the voice that helped their hearts
was thine."

In strange contrast to Tennyson stands Browning. Though Tennyson will always be recognized as the representative, or completest, poet of his age, yet "it is equally true that Browning was in reserve as the leader-elect of the present succeeding age." A student, a scholar, a thinker, a psychologist, a metaphysician, a seer, a genius, a man—no really great man of the century has been so little known by the people nor so nearly worshipped by the cultured as this poet. His verse is no more liked at first than Wagner's music. For both, study and thought are necessary. But when once mastered they seem to give their devotees more delight than aught else in the world.

Browning, too, began under the influence of Byron and passed thence to Shelley and Keats. His first poem, "Pauline," whose publication in 1832 was paid for by his aunt, attracted the attention of Mill, Forster, and Rossetti; but with one rare exception was ignored or dismissed with a contemptuous line by the critics of the press. "Paracelsus," and the "entirely unintelligible 'Sordello'" shortly followed and "became a stumbling

block not merely in the path of fools, but in that of very sensible and cultivated people." But if we look at them with Mr. Lowell's eyes, how significant they become. "Paracelsus" then appears to us to represent, and to be the outlet of, that early life of the poet which is satisfied with aspiration simply; "Sordello," that immediately succeeding period when power has become conscious, but exerts itself in the mere pleasure it feels in the free play of its muscles, without any settled purpose. The time soon came for its display with artistic purpose, and "Pippa Passes" won the public to Browning's side.

Sixteen volumes in all have come from his prolific mind — works notable for variety, learning, originality, and strength. It is a strength, however, that is intellectual rather than imaginative. His intellect threads its way through labyrinthine mazes and over unexplored seas in a way calculated to bewilder, confuse, and dishearten the average reader. His subjects, too, are chosen from abnormal character types and of them he makes psychological studies. He is a lover of the grotesque and ugly as well as the beautiful. To an enthusiast "his teaching is better, braver, manlier, more cheerful, more healthy, more religious than all that has ever before passed for poetry." But confessedly, this perfection is on dizzy heights approachable only by devious, rough, and thorny paths. Even the thoughtful reader must read him carefully the second and the third time. The poet's refinements in the detail of picture-painting, and his subtleness in the detail of soul study, his richness in the lore of the schools, his wealth of terms that belong wholly to the scholars and are *caviare* to the general, do not constitute, as has been said, all of his obscurity. He is also eccentric, abrupt, harsh, disjointed, parenthetical, and metaphysical. In his attempts to be clear and melodious no poet has surpassed him. His lyrics are fresh and stirring and wholesome. His highest and most successful endeavor is made in studies of men and women. He always chooses some critical point in their life and is not content with simply portraying their outward life and conduct, but must look at them with the naked eye, nay more, go down into their inmost souls and lay bare the sources of action.

Well has he been called an anatomist of the soul. A born artist with capacity to put these souls on canvas he has painted these great pas-

sions to the life. And so we find in his works "a full gallery of portraits ranging in subject over joy and grief, pride and humility, crime and virtue, fear, hate, love, and aspiration." It is the strange contrasting forces of passion coming into play under peculiar and distracting conditions, the perplexed problems of character and life that he delights in. Hence in strength and depth of passion and pathos, in wild humor, in emotion of every kind, he has had no equal among his contemporaries. Whether he has failed in his art or has invented a new art remains for posterity to decide.

In poetry there is no other name worthy of a place beside Tennyson's and Browning's. A decline in poetic range and power is manifest. During the last twenty-five years much poetic learning has been evinced, but next to nothing of the poetic spirit. Were it within the scope of this paper it would be interesting to trace the descent of English poetry from the heights of Parnassus to the dead level of perfect technique, luxuriant verbiage, charming prettiness, and uniform mediocrity. In the matter of technique the present school is admitted to be superior to all the schools which have gone before. The poet's vocabulary is rich, varied, sonorous, recondite, and above all picturesque. But in the substance and body of his meaning and in the value and permanence of his thought he is at a far remove from the great leaders, the true poets.

The leader in this new departure, Dante Gabriel Rossetti, is dead. Born in 1828 (died 1882) he came to maturity at the right time to influence the whole school of English warblers. Indeed it is justly called by his name. Art was Rossetti's profession and he early became the leader of the pre-Raphaelite brotherhood in which were enrolled Millais, Holman Hunt, W. M. Rossetti, and others, and later William Morris, Swinburne, and E. Burne Jones. Rossetti's influence was not so great in respect to the amount of his work as in regard to its qualities and the principles it has suggested. His can well be called the imitative school, for imitators are more apt to fasten upon defects than upon beauties. As worshipers of the beautiful in Greek art they reject the Age of Pericles and delight in the perversions and degradations of the latter days of the empire. In like manner Rossetti began by distorting the defects of Tennyson and Browning. In

the place of their chaste ideals of beauty he has in his paintings and in his poetry enthroned the body of a woman with heavy sensual lips, "an-hungering" eyes, and a "thirsty" expression of the face, set upon a "round reared neck." Bodily beauty is all he dreams of. And so with him and his school natural too often means animal. Hence the sickening recoil of the human heart from such a worship of the beautiful. The chief defects of this school have been admirably stated as follows: "There is no sense in the poetry of Mr. Rossetti and his scholars. It is not nature but art. When they should think they paint; when they should feel they grope in a labyrinth of sound. They have an abundance of language, but they have nothing to say; they have visions of beauty but they are unintelligible."

To many of the foregoing strictures William Morris is an exception. He was born in 1834, and though given to the study of the beautiful from his youth, he has nevertheless won for himself a threefold reputation, as poet, as decorator, and as socialist. To the teachings of socialism he has recently subordinated his whole life. Not only does he share his profits with his artisans, but, if need be, he is ready to go to prison also with his Social Democratic friends. As a decorator he has been largely influential in revolutionizing the taste of the English. He is the chief leader of the great decorative movement which has created the esthetic school, though in this as in many other instances the master suffers for the sins of his followers. But our interest is chiefly in the poet. Among living poets Morris stands unrivaled as a story-teller and he is known as one of the sweetest and purest poets of the nineteenth century. He is furthermore healthfully objective in a time of intense subjectivity and his writings are characterized by manliness, straightforwardness, and reserve of feeling. It is easy to see that he is a pupil of Chaucer, and though nothing can be more beautiful, tender, and melancholy than some of his sweet pathetic stories, yet he lacks the strength and humor of the Father of English song. Adapting Hawthorne's phrase, Mr. Stedman has aptly called him an Artist of the Beautiful.

His first volume, "The Defence of Guenevere and other Poems," was fitly inscribed to Rossetti. The age of ballad-romance, the

pre-Chaucerian spirit, the mediæval tone and color, the studied manner, the ancient and obscure language, were all there. Before his next work appeared, seven years later, he had learned his Chaucer well, meter and all—except the strength and humor. On the appearance of "The Life and Death of Jason," in 1865, Morris was at once assigned a place among the chief poets of his time. This is a poem of ten thousand lines, after the manner of the Odyssey, in which "the old adventurous Greeks again are made to voyage, sing, love, fight, and die before us." His scholarship is so comprehensive that it embraces in its wide culture the spirit of Greek mythology and the genius of Greek, Latin, Icelandic and German poetry.

He has that rare sympathy which makes him grasp easily the feeling of each successive literature from which his stories are derived. Now it is "The Story of Gretter the Strong," then, "The Story of the Volsungs and Niblungs"; again it is a lineal and literal translation of the *Æneids* of Virgil, and then a similar version of the *Iliads* of Homer. But his reputation will perhaps rest on his monumental work, "The Earthly Paradise" (1868-70). As has been well said, "The Earthly Paradise" has the universe of fiction for a field. Greek and Oriental lore, the tales of the *Gesta Romanorum*, the romance of the *Nibelungenlied*, and even the myths of the *Eddas* contribute to this thesaurus of song. It is forty thousand lines in length, yet it is so arranged that each story can be read at a sitting. It will not do to call Morris a great poet. He is clear, sweet, and wholesome, but never lofty, impassioned, or inspiring.

The prince of the new school is Algernon Charles Swinburne, born in London April 5, 1837. His mother was a daughter of the late Earl of Ashburnham, and his grandfather, Sir John Swinburne, who lived to be ninety-eight years old, was on his mother's side a descendant of the famous house of Polignac. Five years at Eton and four at Oxford, together with a natural affinity for learning has given Swinburne wide and varied culture. Mediæval, Italian, French, Latin, Greek, and Hebrew influences abound in his writings. But there is little love of nature and the life of his own time is but meagerly reflected.

His first volume, "The Queen Mother and Rosamond," in 1861, gained him no hearing. The second, three years later, "Atalanta in Calydon," was another attempt to accomplish

the impossible, but it gave him a reputation with such as could appreciate a masterly imitation of the classic Greek drama. His third volume, "Poems and Ballads," attracted general attention. Many were disposed to apply to it the forcible words of the apostle—"earthly, sensual, devilish"; for there was in it a riotous display of sensuous and turbid passion, and art was outraged by the want of decency and reserve. The clatter about it caused hundreds to read it who would otherwise not have heard of it. His next venture was an ode, "Ave atque Vale," in memory of Baudelaire, whose influence is seen in the "Poems and Ballads." In 1872 he contributed "Memorial Verses on the Death of Theophile Gautier," including an English sonnet, an ode and a sonnet in French, and some Greek and Latin verses. From 1867 to 1871 he threw himself with his accustomed impetuosity and verbosity into the struggle of European freedom and there followed one after the other "A Song of Italy" (1867), with splendid apostrophes to Mazzini and Garibaldi, an "Ode on the French Republic" (1870), a poor effort, unequal to the occasion, and "Songs Before Sunrise" (1871), chanting the sunrise of freedom over continental Europe. At long intervals he accomplished what no other English poet has attempted, a dramatic trilogy—with Mary Queen of Scots as subject—"Chastelard" (1865), "Bothwell" (1874), and "Mary Stuart" (1881). In the meantime he had published "Erechtheus" (1876), and continuing his dramatic work he brought out "Tristram of Lyonesse" (1882), "Marino Faliero: A Tragedy" (1885), and "Lochrine" (1888). During this time his lyric muse had by no means been idle. "Poems and Ballads," second series, appeared in 1878, "Studies in Song," 1880, "Songs of the Springtides," 1880, "A Century of Roundels," 1883, and "A Midsummer Holiday," 1884. More than twenty volumes have flowed from his prolific pen. In prose he has been almost equally abounding. Essays upon Blake and Chapman, Criticisms of Arnold, Morris, Charlotte Brontë, "Miscellanies," and numerous contributions in the *Encyclopedia Britannica* go to swell the grand total.

A critical estimate of Swinburne is not easily made. To find the fruit amid such luxuriant foliage is a difficult task. That it is there, no one doubts. But the arbor is immense and the vines are not only intertwined

with the most skillful dexterity, but also absolutely covered with leaves. In melodious phrase and exquisite verse Swinburne surpasses all English poets. In his verse our language becomes as soft as the Italian, as musical as the Greek, and as strong as the German. His vocabulary, however, is not large, and there is almost a paucity of ideas. Moreover, to moderation he is an utter stranger. He pours forth poetry and prose in torrents, as if he expected to be dashed upon the heights of Parnassus by a mighty sea of words. Yet, though excess mars all he does, no one questions the beauty and splendor of his lyrics or the richness and power of his poetic enthusiasm.

Grouped around these there are a dozen or more writers of talent who partly portray the general idea. Robert Buchanan, the Scotchman, standing alone, but especially in "Idyls and Legends of Inverburn" evincing the touch and feeling of a true poet; idyllic and tender Jean Ingelow, who has overcast her bright dawn by haste and diffuseness; the strong and spiritual Christina Rossetti, who, however, lacks power to express her ideals; Edwin Arnold, whose "Light of

Asia" and other Eastern poems shed now but feeble rays; the charming scholars, critics, and men of culture, like Symonds, Watts, Saintsbury, Dowden, Brooke, etc., etc. Chief among this class is Edmund Gosse, born in 1849. His poems "On Viol and Flute" (1873), "New Poems" (1879), and "Firdausi in Exile," show the perfect finish of the time, giving expression to thought and imagination almost worthy of comparison with Tennyson and Browning. But to use an illustration from a kindred art, we find on closer examination that it is a Bulwer speaking and not a Pitt or Fox or Gladstone.

There is still another phase of English minstrelsy represented by Austin Dobson, Andrew Lang, and other writers of elegant trifles. Their very titles are indicative of fair and fragile workmanship. A rondel, rondeau, villanelle, or triolet seems to be the most popular form of verse since 1875. They are the extreme exponents, as well as the most charming, of "Art for Art's Sake"; but it is to be hoped that the esthetic school will shortly give way to those who, as has been beautifully said, will give us art for heart's sake, as the real poets have done.

ENGLISH POLITICS AND SOCIETY.*

BY J. RANKEN TOWSE.

NUMBER I.

BEFORE any intelligent appreciation is possible of the drift and significance of recent political events in England, it is necessary to know something of the social conditions which prevail there, and of the prejudices, interests, and traditions from which those conditions originated. It is the object of the present article to describe in broad and general terms, the fabric of British society from royalty downward, referring briefly to the different classes of which it is compounded, the relations existing between them, and the effect of recent social developments upon the position of the throne.

A good deal has been written of late, not only in this country but in the radical English press, about the rapid growth of republican ideas in Great Britain, the waning authority and popularity of the crown, and the immi-

nent peril threatening the whole monarchical system. There is a grain of truth in all this, inasmuch as there are, undoubtedly, certain forces at work, of which it is impossible to foretell the ultimate consequences, but there is no reason to expect an immediate revolution. The old notion about the divine right of kings and queens, almost an article of national faith not so very long ago, has been pretty well exploded by this time, and with it has vanished a great part of that intense respect, or rather veneration, which once existed for the person of the sovereign, as the vicegerent of heaven; but there is still an abundance of reverence in all classes of the community for the chosen representative of the dignity and might of the empire.

During the last half century a great change has been brought about, by almost imperceptible degrees, in the relations existing between the throne and the people, but it is by no means certain that the influence of the former

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has been greatly diminished, although it is exerted now in a very different manner. So far as legal authority is concerned, the Queen, it is scarcely necessary to say, has less power than the President of the United States, but indirectly she is able by social influences to bring immense pressure to bear in behalf of any measure in which she is interested. Notwithstanding the frequent criticism directed against her on account of her alleged parsimony, her persistent seclusion, her partiality for German princelings, and so forth, her popularity with the general public is almost as great as ever. She may not be able now to reawaken the enthusiasm with which she was greeted in the early years of her reign, when she was a happy young wife and mother, but the loyalty of these later days, if less demonstrative, is probably quite as deep, being due to a profound appreciation of her spotless character and her faithful performance of duty, as she understands it. The celebrations of her jubilee year were a succession of genuine tributes of public esteem and affection such as have been rarely offered to any other ruler.

There can be no doubt that this personal popularity of the Queen, maintained for more than half a century, has conferred additional stability upon the institution of royalty itself, which was damaged very badly by the Georges. The young Queen brought a new atmosphere with her to the court, and her mere presence effected a purification which a male sovereign would have essayed in vain. A new standard of morality was at once established, and the example of respectability set in the palace, was followed, as a matter of course, by all who wished to bask in the smiles of royalty. The whole tone of the upper classes of society was thus vastly improved. The air was cleared of the flagrant scandals which supplied the assailants of the throne with their most effective weapons, and there was a general revival of respect for royal authority.

There was a period, during the crisis preceding the Crimean War, when the popularity of the Queen was endangered by the suspicion that she was attempting, at the instigation of Prince Albert, to exceed her constitutional authority; and a hot outburst of indignation was caused by the report that ministerial dispatches had been tampered with at Buckingham Palace. Whether this was true or not, is a matter of very small importance now, although it threatened weighty consequences

then. The Prince Consort, a man of fine abilities and active ambitions, was generally believed to be impatient under the restraints imposed upon him, and in the light of his published correspondence, it is easy to imagine his eagerness to take an active part in directing the destinies of the country in which he was so prominent a figure. Had he lived to persist in such a policy of interference, he might have undermined the very foundations of the throne, but it is not necessary now to speculate further in that direction. Since his death, the Queen, conservative by nature and with a deep respect for precedent, has been content in the main to be guided by her responsible ministers for the time being, although by no means devoid of opinions and convictions of her own.

It is, indeed, a matter of notoriety, that her personal and political preferences and prejudices are of the strongest and most tenacious kind. All her friendships have been life-long, and she still counts among her intimates a few of the associates of her girlhood. Politically, she has always been a Tory, and has never attempted to disguise her sentiments. Her affection for the late Earl of Beaconsfield, during the closing years of his career, is a case in point and her relations with the Marquis of Salisbury, her present Prime Minister, have always been much closer than those between her and Mr. Gladstone. But in all official dealings with ministers of either political party, she has been careful to maintain as impartial a demeanor as possible, and her tact and prudence in this respect have done much to strengthen public confidence in the principles of a liberal monarchy.

It would be almost impossible to foretell the result of a serious conflict between the crown and the people, should one arise, in these days when radical opinions are rife even in so conservative a city as London, but it is easy to see that a long, dignified, and, on the whole, prosperous reign like that of Victoria, strengthens existing institutions and creates a mighty social bulwark in defense of them.

In considering the republican influences which are doubtless at work in the lower strata of English society, it is most important to remember the forces opposed to them at the top. Fifty years ago the court circle was comparatively small and exclusive, whereas to-day it may be said to include almost all the intellectual as well as the material wealth of the kingdom. Many differ-

ent circumstances have combined to make the distinctions between "the classes," as they are called, more vague and narrow. The growth and diffusion of wealth, the increase of educational advantages, and the power of the press have wrought a certain solidification of the more prosperous social elements, by an extension of common interests and the means of inter-communication. The influence of the Queen and her court has also been exerted, perhaps unconsciously, to bring about the result. The Queen herself is a respecter of principles rather than of personages, and although precise and exacting in all matters of etiquette, has never permitted the question of mere rank to interfere with her social friendships and intimacies. She has always found delight in the company of any of her subjects distinguished in art, literature, or science, and her son and heir who is far more democratic in his tastes, probably has the largest and most varied acquaintance of any man in the world. These examples have been more potent than is generally suspected in weakening, if not in altogether destroying, those subtler distinctions and prejudices of caste which, not so very long ago, subdivided the world of fashion into innumerable coteries, each of which was a little world revolving in a sphere of its own.

Of course, in so complicated a community, containing so many different gradations of rank, there are still and always will be circles within circles of which the innermost are the most exclusive, but it is nevertheless a fact, to preserve the metaphor, that the communications between the outermost circumference and the common center are much more frequent and intimate now than they have ever been before. To this extent at least democratic principles have prevailed in England that there is no longer any notion among the cultivated classes that any superiority is conferred by inherited rank alone. The advantages of a good lineage and a fine estate are appreciated there as they might be here or anywhere else, but the possession of them no longer confers social distinction independently of personal character and ability.

For many years there has been in progress a process of amalgamation between what may be described as the upper middle class and what was called formerly the aristocracy, meaning the nobility and a few untitled families of great wealth and antiquity. It would be a great task nowadays to define the

meaning of "aristocracy," a word once so significant. Supposing it to refer, primarily, to royalty and the nobility, it must certainly be held to include those classes with whom aristocrats associate habitually, or, in other words, the entire English worlds of literature, art, and the sciences, of the church, law, and physic, to say nothing of successful merchants, and thousands of other men or women distinguished in one way or another.

It is here that we reach the point at which this introduction has been aiming, a very important one in any consideration of the contemporary English political situation; but one which is generally overlooked. This point is that whereas the old aristocracy, so far as its exclusive powers and privileges are concerned, has been practically abolished; it has been replaced by a new aristocracy, infinitely more numerous, compact, and influential than the older body, knit together by a community of interests which depend largely upon the continuance of existing institutions. In other words the democratic course pursued in their social relations by the present royal family, especially by the Prince of Wales, who for many years has discharged most of the social duties of the monarch, has resulted in the amalgamation of a variety of social forces, representing a great part of the intelligence and the bulk of the capital of the country, into a body which would be almost certainly opposed to anything in the shape of a radical change of constitution no matter in how peaceful and constitutional a guise it might be offered.

It must be remembered that what is now known as English society is no longer confined to the metropolis, or the precincts of the court, but includes all the most prosperous and intelligent population of the principal cities and of the country at large. The distances are so short between the centers of activity in the British kingdom that they may be almost said to be within touch of each other, in these days of railroads and the telegraph, and, speaking broadly, their interests are so interwoven as to be almost identical.

With respect to minor details of government, as we shall see hereafter, this great class is divided into factions, but in regard to essentials it is pervaded by a spirit of strong conservatism. From the duke to the draper all its subdivisions are more or less interested in the maintenance of the general prosperity, of the value of real estate, both improved and

unimproved, and of bonds, mortgages, securities, and investments of all kinds, all of which would be subjected to incalculable fluctuations in the event of any social upheaval. Property interests are ever the strongest safeguards of government, and it is in this great middle class of English society, with its vast commercial and manufacturing interests, that the foundations of the monarchy are likely to find their firmest support.

This being the case, as it undoubtedly is, it will be seen that the democratic conduct of English royalty during the last twenty-five years may have been dictated by motives of the soundest policy. It is certain that the throne in the event of a popular tempest could not look to the aristocracy for much more than moral support, and of that it would be assured in any circumstances.

The days of the House of Lords, in its present estate, may be said to be numbered, and the principle of hereditary legislation will almost certainly be modified if not abolished altogether, before the end of this generation. The political power of the nobility will then depend only upon their wealth and social influence which would weigh very lightly in the scale when compared with the enormous resources of the professional manufacturing and mercantile classes. There are not wanting even now signs of the constantly diminishing influence of the nobility as an exclusive order. Slowly but surely commoners are appropriating the public posts which were once regarded almost as the perquisites of the titled class, and it is only in securing the ornamental offices of state that inherited rank now confers any advantage. In course of time the nobility will lose the control of even these sinecures, and will be compelled to take their chances in the general struggle for advancement. Many of them discern clearly enough the drift of political events and are already making preparations to float with it, rather than run the risk of being overwhelmed altogether in the attempt to resist it.

The younger sons of peers, who, a very few years ago, would have thought it infinitely beneath their dignity to adopt any other means of livelihood than those offered by the army, navy, or church, are engaging in all kinds of business pursuits, not because they are driven to it by present exigencies, but because they prefer to work for a living rather than face the prospect of a life-time of genteel poverty. The younger sons of the

Duke of Argyll, for instance, are engaged in trade, although they have one of the Queen's daughters for a sister-in-law. This is a striking illustration of the manner in which old barriers are being broken down, but many others of a similar character might be adduced, if any evidence were necessary to prove a condition of affairs which has so often been the subject of public comment. Sooner or later the relations between the titled and untitled social elements will become so intimate that the dividing line between them, which is rapidly growing more and more indistinct, will be obliterated, and no one will be able to say where the nobility ends and the upper middle class begins.

It may be as well to pause here for an instant to direct attention to the extreme elasticity of the term middle class when used in the English sense. It is often employed vaguely to include the entire population above the rank of a mechanic and beneath that of a peer, or perhaps a baronet. As a rule, however, for purposes of definition, the terms "upper" and "lower" middle class are employed. In the former would be included all members of the learned professions, officers of the army and navy, the landed gentry, artists, scientists, the most prominent merchants and successful men generally, while under the latter head would come the great bulk of lesser merchants, small farmers, retail tradesmen, artificers, and so forth. Together they form the real financial and political backbone of the British empire, and it is upon them that the whole fabric of royalty mainly rests. So long as this central mass, the very bowels of the body politic, remains content and loyal, the fate of the House of Lords is a matter of comparatively small moment, and the various agitations among the poorer classes of the cities, concerning which more will be said hereafter, are not likely to have any very serious result in the near future.

The very nature of the public duties performed by the royal family tends to popularize them with this great middle class. The Queen herself since the death of her husband, has seldom been present at any popular ceremony, but her children, especially the Prince of Wales and his wife, pass the greater part of their lives in visiting different points of the kingdom to share in various local celebrations. The Queen, who, at one time lost much popularity by her long-continued se-

clusion, now has, in her age and her state duties, a sufficient excuse for avoiding the fatigues of travel. Few women of her years would be willing to undertake the cares and responsibilities which remain to her. Although her responsible ministers are the actual rulers of the country, she has never been content to play the part of a mere figure-head. She takes an active and intelligent interest in all the chief questions of the day, consults frequently and corresponds freely with the principal members of her cabinet, and does not affix her signature to important documents until she has mastered the matter contained in them. Her long experience has made her an expert in diplomatic forms and expedients, in parliamentary rules, and in questions of constitutional and international law, and her voice, when raised in council, carries the weight of wisdom as well as of rank. Her private correspondence, which is by no means confined to relatives or to family affairs, is enormous, and her acquaintance and sympathy with the minor details and occurrences of life are manifested in a thousand different ways, of which it is not necessary to speak in this place. It is sufficient to say that she is a woman of great industry and rare executive ability, who works a great deal harder than most of her subjects, and certainly ought not to be charged with neglect of duty because she exhibits a preference for such privacy as monarchs may enjoy.

The Prince of Wales, at all events, is in evidence upon every possible occasion, and devotes himself assiduously to the task of making friends in every corner of his future kingdom. It is he who plays the part of national host when other royalties visit Great Britain, and visits foreign courts in his turn as the representative of his mother. He reviews the troops, as the prospective head of the army, and even enacts upon occasion the rôle of admiral of the fleet. Whenever a foundation-stone is to be laid, or some new institution is to be opened, he is almost sure to be the officiating functionary, and at all important fêtes, celebrations, and anniversaries he is the prominent figure. He is to be met at every race-course, in the hunting field, or in Rotten-Row. He is the honored guest in hundreds of great country houses, and is feasted every week by some civic corporation. His daily program is mapped out by his secretaries for weeks and months in advance, and it is only by the most precise calcula-

tions, and the employment of every known facility of locomotion, that he is enabled to keep his engagements. He is thus brought into contact, almost hourly, every day of his life with new sorts and conditions of men, and is constantly adding to the number of his friends by the tact with which he adapts himself to circumstances.

There have been many varying estimates of the Prince's ability, most of them founded on ridiculous adulation or ignorant slander, but no one has ever denied the singular felicity of manner with which he maintains his own dignity while putting all others at their ease. It is a common saying that he is the most popular man in England, and that if there were a republic to-morrow he would be elected the first president. There is not so much extravagance in this as might be supposed, for the Prince has never identified himself with either political party, and so would be able to appeal strongly to the voters of both, while his marked friendship for Mr. Gladstone during many years would be certain to win him the favor of the laboring classes.

In this state of affairs there seems to be little justification for the warnings of those prophets who hint darkly that the overthrow of the monarchy in England is imminent. With the prestige of his mother's half-century behind him, his own general popularity, and the growing prosperity of the country, it is certain that the Prince's coronation would take place amid such a demonstration of affection and loyalty as has seldom been witnessed. What might happen in the case of his premature death would be a problem not altogether easy of solution, but even then the combined conservatism of taste and habit would prevent any immediate revolution.

The main features, then, of the present political and social condition of England may be summed up concisely as follows: (1) An aristocracy preserving its wealth and external dignities, but gradually losing its exclusive social privileges and political powers; (2) a vast middle class gradually encroaching upon and absorbing the privileges and precincts of the aristocracy, concentrating within itself the wealth, energy, and intelligence of the country, and creating a force essentially conservative so far as the main features of the present form of government are concerned; (3) the laboring class, much more numerous than the middle class, but to a large extent dependent

upon it, in which there are elements of radicalism and socialism, which may sooner or later become dangerous, but are yet undeveloped and well under control.

This subject will be considered more fully hereafter in connection with its possible effect upon the voting at the next general election, which may result in a new distribution of political power, but is not likely to disturb the constitution. A good deal remains to be

settled before the country will be ripe for that, the Irish question, for instance, and the questions of labor and taxation, the powers of the House of Lords, the female franchise, the agricultural problem, the legal limits of trades unionism, and many others, not to mention the urgent matters of military and naval preparation and legislative reform, all of which constitute topics for the discussion of the day.

THE STORY OF NO MAN'S LAND.

BY JOHN R. SPEARS.

IT is the story of the only territory that ever existed in a civilized nation that was wholly without the pale and protection of law—the only territory so located that was absolutely lawless.

Let the reader look at a good map that includes Colorado, Kansas, the Indian Territory, Texas, and New Mexico. Lying across the northern end of the Texas Panhandle will be found a narrow strip of land that is commonly printed as a panhandle to the Indian Territory. In some recent maps, however, the western line of the Indian Territory, the one-hundredth meridian, is continued up to the Kansas line, leaving the narrow strip isolated. This strip, $34\frac{1}{2} \times 167$ miles large, and containing over 3,700,000 acres of land, is No Man's Land. To the Post-office Department it is known as the Neutral Strip, Indian Territory. In the West it is commonly called the strip.

It was a part of the republic of Texas, the northern boundary of the Panhandle of the republic being the Arkansas River. When Texas was admitted into the Union she sold to Uncle Sam all of her territory lying north of Mason and Dixon's line, or the parallel of latitude $36^{\circ} 30'$ north. She did this because her citizens were slave-owners and it had been previously agreed by the free-soilers and slave-owners in Congress that the land north of that line should be free soil.

This act of admitting Texas with such a northern boundary was the first step in Congress in creating a lawless territory. The next act of the sort was the Kansas and Nebraska bill. This bill provided that the southern boundary of Kansas should be Mason and Dixon's line. Stephen A. Douglas pointed out that such a boundary line would take from

the Cherokees, contrary to the treaty, a long strip of land over thirty miles wide. The boundary was therefore changed to the thirty-seventh parallel, which was the northern boundary of the Cherokee outlet.

By this act a narrow tongue of land was left between Kansas and Texas that like the territory west of Kansas was unorganized. Thereafter, Colorado and New Mexico were organized with fair lines for boundaries and the little strip was wholly overlooked.

These legislative oversights were of little moment at the time they were made. No Man's Land was then and for a good many years afterward remained a small part of a great pasture for the buffalo, deer, and antelope—a choice hunting-ground of the Comanches and a mighty dangerous trapping-ground for a few adventurous white men. It was drained by one considerable river, which the white men named the Beaver on account of the number of beavers found there.

Eventually the great profits realized in the cattle business led the cattle-men to push out with their herds—farther and farther from the settlements, to create settlements, in fact, hundreds of miles from any railroad. The buffaloes were exterminated, the Indians overawed. In this way Tascosa and Mobeetie came to have an existence in the Texas Panhandle.

Then by the building of the Santa Fé railroad, Dodge City, Kansas, came to be a frontier city of much importance. It was a convenient shipping point for the cattle herded, both to the north and the south, and a point at which cow-boy supplies could be obtained. To carry these supplies to Mobeetie and Tascosa, Texas, a regular trail was established

from Dodge City. The growth of business over this trail was rapid and in 1886 there was no trail in the West so busy.

Half-way between Dodge City and Tascosa the freighters reached the Beaver River in No Man's Land. It was a charming country to their eyes. The water of the river was sweet, the shade of the cotton-wood trees inviting, the supply of game apparently inexhaustible. Here the freighters tarried for from two days to a week to rest their teams.

Among the freighters was Jim Lane. Lane saw that the popularity of the resting-place could be increased by the establishment of a ranch there, with a stock of such comforts—including tobacco, liquors, cartridges, and food—as freighters and cow-boys liked most. Early in 1880 he built near the bank of the Beaver a house with sod walls and sod roof, a corral with a sod wall, and hauling there a stock of goods settled down to entertain his guests. He is still there at the old stand. He has many neighbors now; he had none then. Jim Lane was the first settler in No Man's Land.

Jim and almost every one else in the country supposed his ranch was in the Indian Territory and therefore likely to be demolished by the United States authorities at any time and its proprietor sent over the line. He was of the sort to rather enjoy the prospect of a little fracas of this kind. But no one else among the hundreds of the freighters and frontier strollers who passed over the trail seemed to fancy such doings, for although the soil was fertile here and the region attractive generally, Jim got no neighbors until the summer of 1886.

It remained for the enterprising boomers of Wichita, Kansas, to discover that No Man's Land was a distinct entity, to name it, and to let the world know of its existence. Here was public land enough to supply 20,000 grangers with farms and boomers with town-sites galore,—and only one settler in the whole region.

Shall such things be? Not while Wichitans were able to lay out the town-sites and sell the lots to the highest bidders. The Beaver Town-site Company was organized forthwith, and the company's agent sent with a surveyor's outfit to Lane's ranch, arriving early in March, 1886.

An oral agreement was made with Lane by which, in consideration of certain town-lots, he was to relinquish his right to claim a

homestead of 160 acres, and a town-site of 620 $\frac{1}{4}$ acres, "more or less," was laid out on the banks of the Beaver. It was called Beaver City. The agent built a sod house, and sat down to wait for the people to flock to the banks of the river and buy his lots. The company flooded the Western newspapers with stories of the marvelous riches of the newly discovered Government land open to settlement, and in consequence frontier speculators, strollers, boomers, adventurers, and home-seekers tumbled over each other in their haste to get to the new Eldorado.

But when the agent came to sell the lots, he found himself lacking in one essential to such a transaction. He had no lots to sell. The town-site company had been unable to enter up their plot in the Government land office. They found on application that No Man's Land had not been surveyed as it must needs have been under the law before being open for settlement, and what was of equal or greater importance there was no land office or United States Court that had any jurisdiction over that territory.

It was hard luck for the company, but the incoming settlers looked on the matter with indifference then. The settlers could as squatters hold whatever lots or land they improved, and they set about building a city.

When fall had come, Beaver City was a roaring frontier settlement. It was on good land; it was on Government land; it was on the extreme frontier. Those were sufficient reasons for sending a host of frontiersmen to the new city and the land round about. A score of other towns, some meant to be rivals of Beaver City, were laid out and in some cases building begun. Business was thriving. It was conducted for a time there just as it was elsewhere in the West, until the people found that they were really beyond reach of the courts; then the liquor men stopped paying license.

For nearly a year people did not fully realize the condition of affairs. There were town-lots and farm claims, a plenty for every one. But as the population increased, a competition for choice sites arose. Besides that, the antics of the lawless spirits of the frontier were more trying to a law-abiding people after a few months' experience than they were when novel. The people tired of being driven into their houses by the fusillades when the cow-boys "shot up the town." The need of some sort of a tribunal with power to

punish criminals was apparent. So, since Congress had done nothing, an attempt to organize a government at Beaver City was made.

Naturally the subject uppermost in the minds of these squatters was a lawful title to their claims. The first attempt at self-government was the adoption at a mass meeting in Beaver City of six rules or resolutions by which the subscribers thereto were to be protected in holding claims for themselves, and their next of kin living elsewhere, as well. Rule six said that "measures sufficiently shall be resorted to to compel" the malcontents to comply with the rules.

Under these rules one George Scranage attained the distinction of a personal mention on the floor of the House of Representatives in Washington. He took up a lot of claims ostensibly for relatives and then advertised in papers in the Mississippi valley that he could give "the best situation and figures on land" in the neutral strip, with "title clear and terms easy." Congressman Payson mentioned the doings of Scranage in a speech to the House. He said: "Every man who publishes advertisements of that kind is a thief and a robber. There are no titles to No Man's Land."

Among the claims held by Scranage was one adjoining Beaver City. It was jumped by parties who, because they had no farm claims, had a better right to it than Scranage, who held and lived on a claim elsewhere. Scranage and his friends rounded up, disarmed, and shot both the claimants. It was murder done in cowardly fashion, but the victims were frontier toughs, and it did not matter there. Their funeral was the first held in No Man's Land.

The need of a local government became more apparent, and a mass meeting of citizens was called, as the circular said, "at the school-house," to consider the best method of organizing a government. They had built a school-house and opened a free school by private subscription almost as soon as they had a grocery.

The meeting was held in the school-house on November 29, 1886. It was there agreed to hold on February 22, 1887, a general election throughout No Man's Land to choose delegates to meet at Beaver City on March 4 to organize a territorial government. Another set of rules governing the holding of claims was also adopted and an arbitrating

committee to hear disputes over claims was appointed.

The election was duly held in Beaver City and vicinity, but people elsewhere in the strip, which by this time had 10,000 inhabitants, regarded that town with envy and would have none of it. The delegates met on March 4, among them being two preachers.

The first step in organizing a government was the adoption of a resolution by which the delegates recognized "Almighty God to be the Supreme Ruler of the Universe," and the constitution of the United States "as our organic law." Then a bill regulating marriages was passed. After this another resolution was adopted which provided for an election to be held in the ensuing fall (November, 1887), whereat nine senators and fourteen delegates were to be chosen as a law-making body for "Cimarron Territory," the name therein given to No Man's Land. No thought of an executive department for the new territory, nor yet for a judiciary seems to have prevailed.

The people at this time were anxious to have the strip organized as a separate territory. Finding this impracticable on account of its size, the people fell in with the scheme to make it a part of the proposed territory of Oklahoma, and to that end they have since labored.

The November election was held and the legislators chosen. Not one lived over thirty miles from Beaver City. In all, nine met on December 5, the date provided for the first meeting of the body. These elected a president and proceeded to fill the vacancies by dropping names of willful absentees, and putting other men in their places. The senators and delegates met in joint session, and this plan has always been adhered to. In spite of the inability of these law-makers to organize any sort of government the people of the whole recognize, the attempt to do so has been repeated once or twice a year ever since by electing new legislators.

The first two bills introduced in this legislature of 1887 provided for road overseers, but as there was no way of collecting taxes for the support of such officers or of compelling people to work the roads, no overseers were elected. Nevertheless on the publication of a call in the city paper in 1888 for volunteers to work the city streets the men turned out almost unanimously and put the streets and the trail north of the town in admirable condi-

tion. Among a host of other acts of the "Territorial council of Cimarron Territory in council assembled," was one no less pretentious than one to govern the formations of railroad and other corporations. The president had at one time been connected in some way with C. P. Huntington, the railroad magnate, and hoped to get Huntington to build a road on the strength of a charter from this legislative body.

Of all the things done by this legislative body, and those that in 1888 and the spring of 1889 succeeded it, but one had any lasting influence. The statutes of Colorado were adopted as a whole for the government of No Man's Land.

Under this act Beaver City organized a municipal government. The mayor had the powers of a magistrate. The city's first chief officer once heard a trial for murder which, although the victim was deliberately shot to death, resulted in a verdict of guilty of the careless use of dangerous weapons and a fine of \$25. The different parts of the territory organized as counties and suitable officials, including county judges, were elected. Crimes were considered by these judges and in case of convictions fines were imposed. The fines were collected, if necessary to do so, by selling the personal property of the convicted and appropriating the proceeds. The money was used to pay the costs of the trial, and in one or two instances where a surplus remained, the money went to the school-teachers.

In the murder case just mentioned, the accused had been guilty of arson and brought the only witness of his crime to Beaver City by guile and there killed him. A brother of the murdered one came to Beaver City afterward and killed the guilty man.

The local courts were chiefly valuable to the people in settling disputes by arbitration. In one case that occurred when I was there in December, 1888, the judge and a posse went to the North Flats where the neighbors were quarrelling over a claim, disarmed the entire outfit, brought the quarrelsome ones to town, got them together, and made them friends again. It was done by moral suasion backed by repeating rifles. That is, the judge said in effect, "We have come to see fair play. Both sides want what is right only. Don't you think you'd get on better if you let us keep the guns until after the matter is settled, because if you don't we'll have to take them anyhow?"

I talked to scores of people there and they all said that the courts were always just.

The failure of the legislative bodies to command the respect of the people did not act very disastrously. The people were mainly home-seekers and disposed to frown down riotous practices. The toughs and desperadoes soon found the place dull after the boom drooped in consequence of the failure to get titles to land, and so left for livelier towns.

At the same time as the fact that there were no other restraints on crime than conscience, and the rifles of the neighbors became more widely known in the West, a good many criminals went to No Man's Land to escape the officers of the law. Known violators of the marriage laws of the states were tolerated in Beaver City. The dealers in liquors ceased to pay the Government license fees. One enterprising liquor man opened a moonshine distillery, which the revenue officers could not touch, of course. Two enterprising rascals set up a bogus silver coin outfit and ran it openly and unmolested until Treasury detectives decoyed one of them over the Kansas line and there arrested him for having the bogus coin in his possession—not for making it. A village called Beer City, composed exclusively of disreputable houses—the only village of the sort ever heard of in America—was built just over the line from Liberal, Kansas, to accommodate the sinful among the population of what was in the summer of 1888 a booming town. Beer City was a curious monument to the efficacy of Kansas prohibition.

The people of Stevens County, Kansas, got into a dispute over the location of their county seat. A party of one faction found a smaller party of the other faction over the line in No Man's Land, corralled them and disarmed and killed them under peculiarly atrocious circumstances. For this crime the murderers were arrested and taken before the United States District Court. But because No Man's Land was not within the limits of any court whatever, and because the constitution of the United States provides that "in all criminal prosecutions the accused shall enjoy the right to speedy and public trial by an impartial jury of the state and district wherein the crime is committed, which district shall have been *previously* ascertained by law," the murderers had to be discharged.

The people of the strip are but little better off now. By a bill that became a law last

spring No Man's Land was included within the jurisdiction of a new court created to sit at Muscogee, Indian Territory, in the matter of crimes less than capital cases, and in civil suits involving more than \$100. Capital cases are to be tried in Texas. So in cases involving less than \$100 the citizen of No Man's Land has now no redress whatever. The county judge can no longer confiscate personal property to satisfy a just debt of \$99, as he used to do, because to do so would be taking property without due process of law—would be a crime.

More than that, to seek justice at the Muscogee court involves this people in hardships well nigh incomprehensible to the people of the older and well-settled parts of the country. From the strip to Muscogee is a journey of from three to five days, according to the place of departure. It is as if a citizen of Vermont had to go to Arkansas to attend the Court of Common Pleas.

Under the depressing influences of the failure to obtain the passage of laws that would extend its protection to the citizens of No Man's Land, to which as Americans they are entitled, the booming town of the spring of 1887 became well-nigh a waste in 1889, es-

pecially after Oklahoma was opened to settlers. The failure of crops in 1888 greatly aided the exodus. But a few remained. The local paper, the *Territorial Advocate*, is still printed and tells with never flagging interest of the many advantages of the country.

Because there were no laws there the people were terribly sensitive about newspaper stories of crimes done there, although as a matter of fact, Beaver City, as those stories demonstrated, was one of the most orderly towns the frontier ever saw, law or no law.

The country will some day, and that soon, I think, be well settled. The south wind sometimes blows with a heat like unto that from the fiery furnace of Nebuchadnezzar and an occasional blizzard brings terror and sometimes death in its train, nevertheless the climate for ten months of the year is fine. Corn does not do well, but crops, like wheat and oats, that mature early, and all sorts of garden vegetables flourish wonderfully. Where the land can be irrigated, the production is marvelous. For cattle no better country need be sought, even if it is treeless. When once the settler can obtain a title, No Man's Land will very quickly become a populous and prosperous territory.

SPENSER'S FAERY QUEENE.

BY H. T. SUDDUTH.

A SHEEN of glancing shields and lances borne
 At rest—lone vigils, quests by land and sea
 Through perils dire—all monsters dread that be
 In Faery Land—brave knights and ladies lorn—
 The Garden of Adonis facing morn,
 And Castle brave where writ in gold we see,
 "Unto the victor of the gods this be";
 And, seeing, hold base thoughts and deeds in scorn.

Sweet bard of poets loved! thy antique lay,
 For noblest deeds or pleasance fair most meet,
 Like mountain stream through meadows finding way,
 Of mountain and of meadow seems a part;
 And on its current, silver-smooth and sweet,
 Rides Fame as Death on spear of Britomart.

MARIA MITCHELL.

BY HARRIET PRESCOTT SPOFFORD.

WHILE there have been many women eminent in the walks of classical learning, they have been comparatively few who have won the greater heights of scientific achievement ; but among those few no name is brighter than that of Maria Mitchell. She owes her fame to no adventitious circumstances or favor or fortune ; but to the fact that she was one of those people possessed with the pure love of science, and of science in its loftiest form, the form which seems to compass a clearer penetration into the divine intention than any other except that of the abstruser mathematics.

In Caroline Herschel's case, science had no claims but those of affection. Born with decided musical capacity, into a musical family, taken by her brother Wilhelm from the fire-side and the knitting-needles to help him in his concerts and sing his music there, and intended by him to develop her vocal powers and lead a musical life, becoming gradually his mechanical drudge and then his chief assistant, holding the ink for instant use beside him on writing nights when it froze in her fingers, and making calculations for him before she knew what they meant. Caroline Herschel never loved science for its own sake with any absorbing passion, although reverencing all it revealed ; she loved it and pursued it for her brother's sake, and dropped it, as far as one can drop a life one has lived for half a century, when that brother died. But Maria Mitchell, born into the atmosphere of science, with an aptitude for its work, encouraged and stimulated by intelligent and loving companionship in it from the first, searched the mysteries of the stars in her early childhood, and loved them for themselves. She was not a dozen years old when she was busy recording her father's observations of the sidereal heavens ; and before she was thirty she had herself made discoveries in them of widely recognized importance. The studies she began so early and with such ardor, she continued through all of a vigorous and healthy life, and only abandoned them when she had done an ennobling work for her generation and death opened the way for her, let us hope, to fuller knowledge. Yet her affec-

tions were no less keen than Caroline Herschel's were ; her father was her idol, and her published will shows the strength of her regard for her family.

Maria Mitchell's ancestry, parentage, and early environment were all extraordinarily favorable to her, although at first glance modest circumstances and a narrow purse might be supposed hostile to any peculiarly brilliant career. On her mother's side she was descended from the Quaker who was one of the first three settlers of Nantucket, fleeing thither to escape the religious persecution of the main-land ; a strain of the same stock was in the blood of Benjamin Franklin. Her father in his younger days, followed the pursuits of the island, but afterward became a school-teacher. He might be said himself to have inherited a tendency toward astronomical studies, as his father was something of an astronomer before him ; he calculated in later years what his own age must have been by his remembrance of the position of the planet at the time when his father one night showed him Saturn ; finding that he was then only eight years old. Always maintaining his interest in the stars, he built himself by and by an observatory sufficient for his purposes, where he earned a stated sum with mathematical work done for the Coast Survey. In this work his daughter Maria was very early his delighted assistant, taking in her eleventh year the observations at a lunar eclipse.

Maria Mitchell was born on the first of August, 1818, one of a large family, a dark, lively, healthy, and affectionate child. She had no great opinion of her own powers at any time, saying once that she had only ordinary capacity, but extraordinary persistency, and adding with fine but needless humility that she had not realized this fully herself till meeting the best minds of the college girls and becoming acquainted with the unworked wealth of their resources.

For some years her father's pupil, she was afterward instructed by Cyrus Pierce, a noted teacher of the day, and she became his assistant in the school when she was about seventeen ; but in the next year she was made librarian of the Nantucket Athenæum, remain-

ing for twenty years in that position. It will thus be seen that she had in her youth the immense advantages of the companionship of sturdy brothers and sisters and of a studious and reflective father, and a home where the life of the world and the new facts of science were objects of eager interest, and where books were the chief friends.

She had read Rollins' "Ancient History" before she was ten years old, and was familiar with broad sea and open sky, moreover, as only they who live the island life can be, while her father's telescope which was more than a usually good one, had given her already the freedom of the stars. Very possibly the breadth of sea, the depth of heaven around and over the naked island, had already powerfully impressed her childish imagination, and opened not only the horizon of her thought but of her whole moral nature and of her soul; she was molded by no small influences, but by the elements in their fullest and strongest aspect and action. The various phases of the sea that swung about her rosy with sunrise, purple with evening, gray with storms, giving back the starlit vault at night, all went to shape her nature; and the loneliness of the wide sky made her more vividly conscious of the life that peopled it in the pristine energy through whose force it was won with stars. With this the quaintness and simplicity of the island people and of the life they lived, of which she was herself a part, the emotions of a sea-faring community whose every house had its own observatory from which to sweep the waters, their trust, their honesty, their confidence, wrought also its own ennobling and sympathetic effect.

There is something very interesting in the thought of this period of Maria Mitchell's existence; so young, so fresh, so strong, so self-forgetful, oblivious of the gayeties and frivolities of girlhood, and reaching forth into the mysteries of creation and the outer universe; and a great deal of preparation must have been made here in order to fit her for the great part she was presently to play.

In October of 1847, when she was about twenty-eight years old, sweeping the heavens as usual one night, there shone in the field of the glass a swift white apparition that was not a star, that was nothing which had been ever seen by her eyes before. Her heart must have bounded; she could have doubted the evidence of her senses, which told her it was a

new comet that had been revealed to her; she hurriedly made out the right-ascension and declination, and, in no hurry about it, a couple of days later her father wrote to Professor Bond of the observatory at Cambridge, the letter given by Mr. Parton.

"My Dear Friend:—I write now merely to say that Maria discovered a telescopic comet at half-past ten, on the evening of the first instant, at that hour nearly above Polaris five degrees. Last evening it had advanced westerly; this evening still farther, and nearing the pole. It does not bear illumination. Maria has obtained its right-ascension and declination, and will not suffer me to announce it. Pray tell me whether it is one of Georgi's; if not whether it has been seen by anybody. Maria supposes it may be an old story. If quite convenient just drop a line to her; it will oblige me much. I expect to leave home in a day or two, and shall be in Boston next week, and I would like to have her hear from you before I can meet you. I hope it will not give thee much trouble amidst thy close engagements. Our regards are to all of you, most truly,

"WILLIAM MITCHELL."

In reply to this letter, Professor Bond assured Miss Mitchell that she had really made a discovery; and although the comet was presently seen by European astronomers, it was evident that she had been before them. She received, in recognition of this, the gold medal offered by the Danish king some years before for the first telescopic comet, not without some difficulty, as one of the terms of the offer had been that the discoverer should notify the astronomer-royal of Great Britain by the first mail following, which in this case it had been omitted to do. But Mr. Edward Everett, and other friends more eager than herself, insisted on her claims, and the medal was awarded to Maria Mitchell. By her will she bequeathed this medal to one of her sisters, and the medal that she received from the republic of San Marino, to a niece.

She still performed her duties as librarian, but at the same time did a good deal of mathematical work for the Coast Survey, and for the Nautical Almanack, never knowing how to be idle. It was ten years before she made the visit to Europe which was so full of delight and satisfaction. She had previously, however, in 1850, been elected a member of the American Association for the Advancement of Science, although not made a fellow for

nearly a quarter of a century afterward; and in 1852 she had received the degree of LL.D. from Hanover, a distinction which Columbia College honored itself by bestowing on her thirty-five years later. She was also the first woman elected to membership in the American Academy of Arts and Sciences. It is certain that such recognition as this was pleasant to her, but she valued it for no more than it was worth. She was a woman of genius, and her work was its own reward.

Her tour in Europe might have been styled a triumphal one if it had not been undertaken in a spirit into which no thought of triumph, success, or personal gain could enter. She was received with cordiality by Sir John Herschel, whom she visited for several days, who, doubtless, remembering his Aunt Caroline, felt very warmly toward her, and wrote her afterward, at length, giving her advice concerning the building of her new Nantucket observatory. In London she was the guest of Sir George Airy, the astronomer-royal, in Berlin, of Humboldt, and in Paris, of Verrier. In Russia she visited the observatory at Pulkowa; she spent a winter in Rome with the Hawthornes, where she formed the friendship with Mrs. Somerville and other people of scientific note; and she returned home to find that her friends had fitted up for her an excellent observatory for which the women of America, led by Elizabeth Peabody, had gladly and proudly provided a superior telescope, an event which must have been among the pleasantest and most heart-warming of her life.

In the next year, 1860, she took up her residence at Lynn, Massachusetts, her father also removing there. She continued at her work there for five years, when, Vassar College being opened, she was begged to take the professorship of astronomy, a proposition at which with her usual doubt of her ability she hesitated, but she finally accepted the offer, to the great advantage of the institution and of the numberless young women thus brought into contact with her intense individuality, her lofty exaction, and helpful spirit. Her father lived with her at the college a year or two, happy in his life there and loved by the college girls who felt his death personally.

During the years of her professorship, Miss Mitchell, besides performing the duties attached to that, wrote important scientific essays, edited the astronomical column of the

Scientific American, and took various journeys for better astronomical observation, was elected to several learned societies, and was made President of the Association for the Advancement of Women, having always been deeply interested in the question of woman-suffrage, to the affirmative of which she gave her hearty adherence and unflinching support. "I had so long believed that it was right for women to have a share in the government," she once said, "that it seems to me like the first axiom I learned in geometry, 'a straight line is the shortest distance between any two points.'" Her most earnest endeavor, however, was given to Vassar. She put aside all her own personal aims and ideas in accepting the professorship. To have the astronomical work there strong and vital, to complete the scientific equipment of the observatory, and to make the department self-supporting, were objects to which she devoted herself, stretching every nerve in the undertaking. It was the least of her effort to raise the sum of five thousand dollars for an observatory fund, in which work she was interrupted by her last illness—forty thousand dollars being still needed, a sum which when procured is to be known as the Maria Mitchell Endowment Fund, and to make a part of which probably the thousand dollars that she left the college will be appropriated.

Contrary to her own expectations, Miss Mitchell proved to be a wonderful teacher, "an inspiring teacher," as they called her. The astronomical course being elective, and astronomy under her hands being far from play, it was considered a "hard elective," and only the brightest minds in the college came under her instruction. While there was a certain informality about the classes, as they were never assembled or dismissed, as classes usually are, by bell signals, there was, nevertheless, the most rigid requirement. She gave lectures, provided some play, as one might say, with popular astronomy, but demanded chiefly practical and mathematical work, allowing use of the great equatorial and urging nightly use of the smaller telescopes. She insisted on drawings of all observations, daily photographs of the meridian sun, as well as a record of meteorological matters, and her students made the calculations for much of her published work. While abrupt and masterful in her address, and full of disdain for the pretentious and the indolent, the earnest and persevering student had her

most patient and gentle care and help. Once to relieve a post-graduate who was her assistant, and in whose hands, upon undertaking a journey, she left the care of the instruments, with so many injunctions and apprehensions that the young girl's heart sank under the responsibility, she returned, and opening the door again, said, "Remember! If the chronometer stops, and the sidereal clock stops, the universe won't stop!"

Miss Mitchell was in the receipt of a reverence approaching worship at Vassar, some regarding her with awe, but more with love. How she could drop the appalling garb of science and make herself the familiar of her girls was evident from her Dome Party. She lodged, with her instruments and work at hand, in the observatory, the windows of her rooms overlooking a brilliant garden of whose flowers she was prodigal. The great festival of the year was this entertainment, her students of this and of all previous terms being made welcome in a parlor where the chronograph and sidereal clock, the bust of Mary Somerville, a picture of her father and of one of her sisters busied over astronomical tables,—the sister being there in her own stead because she herself was not pretty enough,—china painted by her nieces, photographs of her favorite pupils, autographs, and souvenirs of travel, and large book-cases overflowing with books, told the story of the tastes of the hostess. When assembled, the party ascended a short flight to the dome where the great telescope was poised with a certain awfulness of its own as if it were part of the machinery of earth and sky. Here tables were arranged with a flower and a picture and a verse at each plate, and a dainty and delicious repast was served. After the delicacies had disappeared, the intellectual features of the entertainment became more prominent, in the reading of witty verses, epigrams, and *bonmots* apropos of various individuals present. Songs interrupted the proceedings, which were renewed with impromptu rhymes, the best of them sung over afterward in chorus by girls perched aloft on the observatory steps—where upon instruction nights Miss Mitchell herself sat enthroned with her girls at her feet, each awaiting her turn at the huge machine with its necromancy;—and sometimes the improvising spirit became so infectious that all the conversation was conducted in impromptu verse, the frolic acquiring greater force from the

sense of the hard work behind it; the songs and cries fluttering round the great lenses, the stone and brass and iron, like a flock of butterflies.

"It was a scene not to be forgotten," says Alice Stone Blackwell, "the crowd of beautiful, bright-eyed, laughing girls, and the stately gray-haired professor in the midst of them, like a granite sun-dial in a rose-garden. The attachment of the students to their professor was evident, and was very pretty to see. When the entertainment drew to a close, one of the girls mounted a flight of steps, and sang to the tune of 'John Brown' a student song in honor of Professor Mitchell, in which the English language was ransacked and grammar set at defiance (in the interests of rhyme), to express what a good woman she was."

Miss Blackwell also says that "as a girl, Miss Mitchell was not beautiful; but in this case, as in many others, time brought its revenges. When she became an elderly woman, the snow-white curls contrasting with the dark eyes and a complexion as brown as an Indian's, made her a singularly striking and fine-looking person, who would have attracted admiration in any company. Her lack of beauty was a grief to her in her youth, and on the death of one of her pupils, a very pretty girl, Professor Mitchell said, with a sigh, 'How hard it must have been for her to part with such a beautiful body!' The truth of these words can be seen by a glance at any likeness of Miss Mitchell, where simplicity, strength, directness, truth, and benignity, make a beauty of their own sufficient to delight even the eye of a critic. She always retained some of the Quaker customs, together with certain features of their dress she usually folded a white kerchief at her neck, and wore no other colors than black and white."

Miss Mitchell had held the chair of astronomy for nearly a quarter of a century, when she began to realize that her health was unequal to further exertion, and she begged to resign her position. The trustees of the college, however, would not hear of it, and after a jubilee reception, as it was called, in her honor, she was granted an indefinite leave of absence, and was a little while later made Professor Emerita and offered a home for life at the college. She preferred, however, to go to her family in Lynn, where were her still stronger attractions, for her wide pursuits

never deadened her affectionate nature; and there she erected a small observatory, but was unable to use it as she had hoped. Several months of great debility ended in a stupor which closed the portals of this world upon her failing senses. Once or twice she roused herself for some brief words, and the brilliant young friend already quoted records her as saying in one of these intervals, with all her old directness, "Well, if this is dying there is nothing very unpleasant about it."

In her religious opinions Miss Mitchell might be called radical; she belonged to no sect; she was fearless and outspoken; she despised nothing but pretension. Magnanimity was one of her chief characteristics, and although she had no mercy for superstitions, she respected genuine belief wherever she found it. She was interested in all of the questions of the day, but was never

swept away by any current of excited feeling. The loftiness and largeness of her work came to be a part of herself; her qualities borrowed of the great spaces searched by her eye, of the great sums figured in her calculations; her mental and her moral attitude had the grandeur of one who lives among the stars.

The life of such a woman is not to be measured by the worth of the mere work done by brain and figures. It is not that she penetrated nebulae, found the dark companions of great stars, weighed the sun, and was the familiar of comets, so much as that the effect of her character and deeds, of her thoughts and aspirations, extends and will extend through generations of girls, not merely with the tradition of a great name but with living actual influence, still broadening when she is dust, till its last ripple breaks on the shores of eternity itself.

THE FRENCH CONSTITUTION.

BY ALBERT SHAW, Ph. D.

UNQUESTIONABLY the great majority of the French people, so far as they have intelligence, are sincere republicans. And yet we are constantly told that the republic is in imminent danger, and that almost any month may possibly witness the establishment upon its ruins of a monarchy or a dictatorship. The existing order seems never to approach a condition of stable equilibrium. Every whim and every caprice finds exaggerated expression, and the whole political fabric seems ever on the eve of dire catastrophe. If the overwhelming weight of numbers and of public opinion is republican, why is the republic so beset and menaced? It seems to me that much of the political unhappiness of France is attributable to the way in which the republic is organized; in other words, to the arrangements of the constitution.

To understand the French politics of today it is necessary to revert to the system of the First Napoleon, whose impress upon the institutions and laws of France has never ceased to be felt. In order to strengthen his personal rule as emperor, he established a completely centralized machine for administration. He abolished the ancient provinces

of France, some thirty-six in number, and cut the country up into nearly ninety "departments," each of which was administered by a "prefect" appointed by and immediately accountable to the central government. The cantons, arrondissements, and communes into which the departments, or prefectures, were subdivided, were furthermore administered by sub-prefects and other local officers who derived their authority from the prefects. The whole system was ingeniously contrived to serve the ends of a one-man power at the center. Now it so happens that through all the changes of the century in the central control, the outlying parts of the administrative machine have remained substantially the same.

Such centralization is not compatible with abiding republican government. It always invites some strong man or ambitious adventurer to seize and hold the seat of authority. On the other hand it tempts the people to accept stability and security at the prices of republican liberty. Louis Napoleon, elected president of the second republic in 1848, on the overthrow of the semi-republican King Louis Philippe, found himself in fact a monarch by virtue of the constitutional sys-

tem of his day. He used his opportunity to perpetuate his power, just as the First Napoleon had done, and he sat firmly on the imperial throne until the war of 1870 brought its momentous changes. We are accustomed to speak of the French governmental system as having undergone four or five violent and capricious changes from the period when Napoleon Bonaparte emerged as first consul of the republic to the December day when Louis Napoleon's *coup d'état* brought the second republic to its end. But in point of fact the system was never changed radically. The man at the center, whether called first consul, emperor, "king surrounded by republican institutions," president, or emperor again, was for the time being in full control of the machine. He selected his own ministers, and through them he controlled the army and navy, administered the finances, appointed the prefects of departments, and kept his finger upon every part of the executive ramification. Such a system, originally made for a one-man power, naturally worked more evenly when the incumbent's tenure was permanent.

The people had their elective councils in the communes and arrondissements, and their councils-general in the departments; but these representative bodies, although enjoying a limited deliberative and financial authority, had almost nothing to do with administration. They were practically at the mercy of the prefects and sub-prefects appointed by the central government. And the system remained in general respects the same under all the personal or dynastic changes at the top. The national parliament had to do with taxation and law-making, but it had no hold upon the administering of the laws.

On the downfall of Louis Napoleon, a national assembly was chosen to arrange terms of peace with the Germans and to provide for the new government; and the country was under the provisional presidency of the aged Thiers. In November, 1873, the assembly confided the executive power to Marshal MacMahon for a term of seven years; and in 1875 it adopted a series of organic laws which with certain subsequent modifications form the written constitution of the third republic. The old-time centralization was maintained, and the entire local administration of the country continued to be under the surveillance and control of prefects appointed by the president through the minis-

ter of the interior. M. Clémenceau, the brilliant radical leader, has told me that the monarchists, who were a strong element in the assembly, would have been willing to adopt a decentralized system in the hope of being able thus to control the local *régime* in many of the departments; while the republicans, confident of holding the central government, were determined to preserve a system that would enable them to supervise affairs in the remotest prefecture. If this is true it is a curious illustration of the contradictions of French politics. In the hope of temporary advantage the republicans were clinging to a system essentially subversive of republican institutions. As Senator Jules Simon, however, assures me, the matter did not come up prominently for discussion, it being evident that the centralized system would have the support of a decisive majority.

But the constitution-makers of 1875 introduced a great and fundamental change. They adopted the English system of parliamentary government. They made the ministers collectively responsible to the Chambers for the general policy of the administration, and individually responsible for their personal acts. The president was exempted from responsibility except in cases of high treason. He was relegated to a position analogous to that of the Queen of England, while the prime minister became the real executive head, and his tenure was at the daily mercy of the Chamber of Deputies.

The tendency of the republic to lapse into an empire or permanent one-man power, was thus strongly checked. Administration fell practically into the hands of a committee of the legislative bodies. There is nothing in the constitution to prevent the choice of ministers from outside the membership of the Senate or the Chamber of Deputies. But as a matter of fact, outsiders are rarely selected, and in any case they immediately acquire the privilege of sitting and speaking in both houses, by virtue of their office as members of the council of ministers. The centralization of French government thus gave, and gives, the ministry of the day a tremendous power; but the undue exercise of that power and its complete appropriation, have been made practically impossible by the ease with which ministries are overthrown and compelled to resign.

Instead, then, of a rule and policy too permanent and too personal, France under the

third republic has suffered indescribably from governments so haphazard, short-lived, and inexperienced as to be little better than a state of anarchy. Each year witnesses two or three new ministries. A minister of finance or war or foreign affairs finds himself out of office just as he is beginning to get some acquaintance with his duties. And even if he were to be continued for several years he would labor under a disadvantage because he is practically obliged to be present continually in one house or the other, explaining his policy in general and in particular, superintending the passage of laws affecting his department, and maintaining himself against the political and personal enemies who are continually plotting and making coalitions for his overthrow. An American cabinet minister, responsible only to the President, independent of Congress, and secure in his tenure for the clear term of four years with a reasonable chance of a second four years, devotes himself with great efficiency to the duties of his portfolio and suffers from no distractions. But a French minister has no such opportunity. He rarely holds office longer than six months.

An English cabinet is comparatively stable because there are in Great Britain two permanent and well organized political parties. When one of them is in the majority it may usually count upon keeping power for four or five years. But France has never enjoyed the opportunity for stable government that two strong and dominating parties afford. The Chambers have always been composed of numerous shifting groups. There have been three monarchical parties supporting different claimants, besides a monarchical clerical party; and the republicans have been divided into several hostile camps—conservatives, moderates, and radicals, while on the "extreme left" several very small groups of socialists and anarchists have been disproportionately noisy. In a general way the mass of the liberals on the left side of the house has acted against the mass of reactionists on the right side. But occasionally the capricious co-operation of the "extreme left" with the "extreme right" has gone counter to all calculations.

Gambetta felt the necessity of building up main parties in order to give some stability to parliamentary government. He believed, and rightly, that the intelligence and preponderating force of France were on the republi-

can side, and he desired to evolve a progressive, consolidated republican party to oppose the reactionary coalitions. His plan for accomplishing this end was the abolition of single districts in elections for the Chamber, and the election of all the representatives of a department upon a general departmental ticket. His proposed change from *scrutin d'arrondissement* to *scrutin de liste* was precisely such as we should make if instead of electing congressmen in individual districts we should vote for the full quota of a state's representatives upon one general ticket. We have *scrutin de liste* in choosing presidential electors, and *scrutin d'arrondissement* in choosing congressmen. The French districts, or *arrondissements*, are much smaller than our congressional districts, and Gambetta perceived that petty personal and neighborhood considerations were much stronger than party feeling. He believed that the general ticket plan would bring out a more representative class of men and would compel attention to principles rather than to persons.

Possibly his contemporaries distrusted Gambetta and feared that he would use his popularity to gain personal power. In any case they waited until after his death before they adopted the *scrutin de liste*. The first election under the new system was held four years ago, in the autumn of 1885, in electing the Chamber that is now in its last days. Advanced republicanism has rather predominated in this Chamber, yet party consolidation has not made much progress. The extravagance and misgovernment of dozens of short-lived ministries have now been fairly coming to light in all their aggregation of debts and disasters. France has been in a condition of profound discouragement and dangerous demoralization. The failure of the "parliamentary régime" has been complained of, in the bitterest terms.

Under these circumstances a new political phenomenon has appeared in the person of General Boulanger. He had served in one of the recent cabinets as minister of war, and had been a popular figure. Disagreements which involved allegations of insubordination and wrong-doing on his part cost him both his portfolio as minister and his place as a general in the army. He emerged as a political candidate with a new party behind him and a program of constitutional reform. In a chamber of several hundred members a death or resignation is not uncommon. Under the

scrutin de liste system an entire department must vote to fill the vacancy. General Boulanger's course, then, was to appear as a candidate wherever there might be a vacancy to fill, simply to obtain the endorsement of a new department and add to his personal prestige. Everybody was dissatisfied with the old order of things; General Boulanger was a popular figure; the French people like a hero, especially a "man on horseback"; Boulanger promised a new and reformed republic with a restoration of French prestige; he carried the country departments like wild-fire. Finally last winter a Parisian deputy died. Boulanger was thought weak in Paris, but he finally determined to run. The government and the confederated republican parties agreed upon a candidate and worked desperately; but Boulanger carried the department of the Seine by more than eighty thousand majority.

Boulanger's program was the dissolution of the Chamber, and the election of a great popular constitutional convention to revise the organic law. He told me that he favored thoroughly the American system; that he was no monarchist, but a republican; that he aspired to be at the head of a strong, efficient French republic; that he would do away with cabinets rising and falling at the whim of the Chamber and would have, like the United States, a presidential cabinet chosen for a fixed term and acting independently of the Chamber. Prominent opponents of his admitted to me that the French people had never really had a chance to frame or adopt a constitution and that the organic laws of 1875 were made by a body chosen for the very different purpose of concluding a war treaty with the Germans. This was Clémenceau's view. But conservative republicans, like Senator Jules Simon, with whom I talked, maintained that nothing could be more inopportune than a constitutional convention, and that with the German enemy outside and the communistic enemy inside, France would be in the most imminent peril if she should attempt to alter very fundamentally just now her framework of government. Senators Pressensé and Simon, the great publicist and financier Leroy-Beaulieu, and other distinguished representatives of moderate republicanism, professed to me their continued faith in the English parliamentary system of cabinet government as applicable to France. But my own study and observation have convinced

me that it is a sad failure; and I found no one more strongly persuaded of its failure than Professor Émile de Laveleye, who as a critic of modern governmental forms stands in the highest rank. Professor Accarias, a distinguished authority upon constitutional and international law, in most interesting conversations last winter maintained the necessity of restoring the ancient provinces of France and of giving each its limited local legislature and its authority over ordinary local administration. With this reform he would adopt the American system of a cabinet outside the Chambers, having a fixed tenure and being accountable to the president. Professor Laveleye also advocates the partial renewal of the Chamber; that is, he would have half the membership elected every two years instead of the present plan of a complete renewal at the end of each four years' term.

The experience of the past four years has changed the opinion of almost every former advocate of *scrutin de liste*. After Boulanger's Paris campaign, in which the choice of a successor to a single obscure delegate was allowed to agitate not only all France but all Europe, the Chambers very promptly changed the election law and restored the single districts. Something might be said for the general ticket plan in theory as a temporary system, but in practice it is dangerous and as a permanent system it has no justification.

Many Frenchmen advocate the abolition of the Senate; but that would be a great mistake. The Senate is the balance-wheel of the republic. It has stability and dignity, and its members are for the most part men of high ability and patriotism. The body has three hundred members of whom seventy-five were originally chosen for life. But in 1884 the life senatorships were abolished, — the change taking effect as vacancies occurred. Senatorships are distributed to the departments in proportion to population, and vacancies are filled by a departmental electoral college which includes representatives of all the municipal or communal councils, the members of the council general of the department, and the deputies who represent the department in the popular Chamber at Paris. The senators hold office nine years, and one-third of the seats are re-filled every three years.

The president, who is elected by the members of the two houses sitting in joint assembly, holds his office seven years and is eligible for re-election. He has a position of great

dignity, but his real authority as a ruler is small when compared with that of the President of the United States. It has been General Boulanger's aspiration to become President of the republic after bringing about a political and parliamentary situation that would practically compel President Carnot to resign. The constitutional changes that Boulanger has advocated would increase the power of the presidency. Whether or not the general's ambition has aimed at an ultimate power more permanent and absolute than that of the presidency of a republic, is simply a controverted matter. Whatever the outcome of his bold career in recent French politics may prove to be, he has done his country a service in bringing to light the extent of the dissatisfaction that the present parliamentary system has engendered.

It is frequently deplored that French republicanism has now no great leader, and that this brilliant and magnificent nation is as a flock of sheep wandering uncertainly without a shepherd. But in fact there are plenty of patriotic and able men in France; and if the people would but trust themselves, throw off their feeling of discouragement and forlornness, frankly revise their constitution upon the true model of popular self-government, abandon the idea of war and revenge, and devote themselves to the task of recuperation and financial reform, they could be prosperous, stably governed and happy, and they could dispense with brilliant leaders and "men on horseback." But at present they seem disinclined to a program so obviously wise. The approaching quadrennial election of a new Chamber will be the critical point in the life of the third republic.

HOW POSTMASTERS ARE MADE.

BY FRED. PERRY POWERS.

I ASKED a member of Congress one day, who would probably be appointed postmaster in a small city in his district, and he replied, "I have not decided whom I will appoint." And yet there is nothing in the constitution or laws about the power of a representative to appoint a postmaster; that power is supposed to rest with the president so far as Congress has not vested it in the postmaster-general, by whom it is in fact made over to the first assistant postmaster-general. But if the legal appointing power would as a matter of course appoint any one whom my congressional friend recommended for postmaster in the city we were speaking of, the member of Congress might well enough disregard the legal fiction, and speak correctly in substance though not in form, by saying that he would make the appointment.

Very nearly half the persons employed by the United States Government in civil capacities are postmasters. Leaving out the army and navy there are about 133,000 persons in the service of the Government and there are nearly sixty thousand postmasters. If you add to the postmasters all the clerks in post-offices, and the army of letter carriers, and the five thousand railway mail clerks and contractors for transporting the mails you will

run the number of persons in the postal service up to nearly one hundred thousand. "I am the general at the head of an army of 96,000 men," said Postmaster-general Vilas to a friend.

If you want an appointment as postmaster your method of proceeding will depend somewhat on the size of the town you live in, and somewhat on several political considerations. If you live in one of the great cities you will begin by getting several thousand business men to sign petitions setting forth that you are a well-known business man of large executive capacity, who would make the post-office more efficient than it ever was before, and that they would like to see you appointed. You will also get several hundred of them to write letters to the president and the postmaster-general and the senators from your state and the congressmen from your city, asking him for your appointment. Unless you rely upon a warm personal acquaintance with the president or the postmaster-general you will try to enlist these senators and representatives and the chairmen of the county and city and state committees of your party in your interest, and get them to go to Washington and talk to the president and the postmaster-general and show them what an influential man you

are in your party, which of course I am assuming is the party of the administration. If he be not insane a Democrat will not try to get appointed postmaster by a Republican president, nor a Republican by a Democratic president. Perhaps you spent the previous winter at the state capital trying to get members of the legislature to vote for the gentleman who was finally elected senator. This senator will naturally enough do the best he can to get you appointed postmaster. It is possible that you were at the state capital the previous winter trying to get elected senator yourself, and your progress being slow, you consented to withdraw in consideration of a promise that you should have the post-office of the city in which you live.

In the case of these large post-offices the power of appointment is unreservedly in the hands of the president. There is no well settled political rule as to what recommendations for the appointment shall be binding upon the president. If the city be one in which a senator lives, he is generally allowed to name the postmaster, if he be of the administration party, and if he belong to the opposition, the administration is often courteous enough to give him his choice of the candidates of the opposite party. This courtesy like almost all matters of etiquette, has a basis of sound reason: an offended senator even of the opposition party may sometimes obstruct the confirmation in the senate of the president's nominees.

Where one of the smaller cities is the home of a congressman and a senator, there is often raised a delicate question as to the relative amount of weight to be accorded to the recommendations of each. The senator will claim the appointment on the ground that his is the larger constituency, the whole state, while the congressman will argue that his patronage is restricted, while the senator's is very wide, and the former's one little ewe lamb ought not to be taken from him by the prosperous flock master who shears some federal wool in every county.

If a large city be the home of a senator and of two, three, or more representatives of the administration party, the senator's recommendation would probably outweigh those of all the congressmen, for the latter have no opportunity to defeat a presidential appointment as the senators can do in their executive sessions. But if the senator lives out of the city, his recommendation and those of the

representatives living in the city will have about equal weight.

If you live in a small town where the income of the postmaster does not exceed \$250 a quarter for four consecutive quarters, your fate lies in the hands of the postmaster-general, nominally, though really the postmaster-general will probably never hear of you, or see your name, or know of the existence of your town; the matter will be arranged between the first assistant postmaster-general and the congressman from your district. If the representative has the distinguished honor of belonging to the same political party that you and the president of the United States do, it is essential that you get that representative to recommend you for the appointment. There is no use in your trying to get it in any other way.

If there are other delegates you will as a friend of the congressman try to relieve him of his embarrassment by proving to him conclusively that he will make more friends for himself by securing your appointment than he could in any other way. You will get as many people as possible to sign a petition asking for your appointment. If the congressman is not very well acquainted in your part of the district you will get a great many people who do not live in your town to sign the petition. Of course you will write the petition yourself and you may make it just as flattering as possible; not one man in twenty whom you ask to sign will read the petition.

If you were in the Union army during the Civil War you will make it appear that your military services were exceptionally brilliant, and you will induce the post of the Grand Army of the Republic in your town to endorse your candidacy. If some friends of yours should write to the postmaster-general that the rival candidate was a notorious Copperhead during the late war, that with ample property of his own he sent his mother to the poor-house, and that all the people in town believe that a few years ago he burned his store to get the insurance, it may assist your chances of preferment, and it will be pretty safe for your friends because postmasters-general have an idea that communications addressed to them from people they never heard of, in regard to an appointment to a public office, are confidential, and may not even be shown to the representative of the district.

Fourth class postmasters are by law appointed by the postmaster-general; in practice the work is all done by the first assistant postmaster-general. On December 10, 1888, there were 55,529 of these fourth class offices, and they increase rapidly. As fast as applications and petitions and letters of indorsement regarding postmasterships come in they are sent to the appointment division where the entire country is parcelled out among fourteen clerks; each paper is wrapped in a cover called a jacket, on which is indorsed the subject and substance of the inclosed paper, and filed away in the proper pigeon-hole in the room occupied by the clerk for Illinois and Indiana, or the room occupied by the clerk for Michigan, Tennessee, and the territories, as the case may be.

There are two important functionaries known as the appointment clerks. Mr. Edwin C. Fowler has charge of the fourth class appointments, which are under the first assistant postmaster-general, and Mr. Nathan Smith is in charge of the presidential post-offices, which are under the direct jurisdiction of the head of the department. Mr. Smith knows whenever a vacancy among the larger offices is created by death or resignation or the expiration of the commission for four years which each postmaster appointed by the president receives. He calls the attention of the postmaster-general in ample season to the vacancy that has occurred or is expected to occur and tells him what persons have been recommended for appointment and by whom and what the papers in the case show about the way the office has been managed and the qualifications of the candidates.

Or perhaps the president has decided to make a removal. Thursday afternoon the postmaster-general, who is now Mr. Wanamaker, well-known for his wonderful store and his success as superintendent of Bethany Sunday-school in Philadelphia, and for his connection with the Young Men's Christian Association, and his ownership of the great painting "Christ Before Pilate," presses an electric button on his desk and presently Mr. Nathan Smith comes in and the postmaster-general says, "Mr. Smith I wish you would get all the papers in regard to the post-office in — together and bring them to me tomorrow morning; the President is going to take up that case and I think I will look the papers over before the cabinet meeting." Mr. Smith has been doing this work for a dozen

postmasters-general for the past nineteen years and they cannot get along without him. There are 2,582 presidential post-offices in the country and it is not easy to replace a walking encyclopedia of the whole of them. Four years ago when a Democratic postmaster-general came in, Mr. Smith resigned and retired to a Kansas farm, but Mr. Vilas sent for him and he returned.

Mr. Fowler has charge of the fourth class post-offices. There are twenty times as many of them as there are of the presidential offices, but the great majority of them are small affairs, making little trouble for any one, and Mr. Fowler does not have to keep informed as to the dates when commissions expire because the fourth class postmasters have no term of office; they are appointed by the postmaster-general and hold office during his pleasure. The first assistant postmaster-general is Mr. Clarkson, of Iowa, a man scarcely of middle age, with a stout figure, the face of a judge, and a prudent tongue. He has made *The Iowa State Register* a political power and a source of great pecuniary profit to himself, and he dispatches business in the department with remarkable promptness. Mr. Fowler keeps him informed of all deaths and resignations in the enormous list of fourth class post-offices, and can in a moment produce all the papers regarding any particular office that Mr. Clarkson asks about. He has been doing this almost as long as Mr. Smith has.

Four years ago these two clerks appointed about three thousand Democratic postmasters in three months. When Mr. Malcolm Hay was appointed first assistant postmaster-general he was suffering from the disease of which he died a few months later, and as soon as he took the oath of office he went South seeking some relief. Postmaster-general Vilas could not possibly do his work while he was gone, so he told Messrs. Smith and Fowler that they must keep up the work of the first assistant postmaster-general between them. They did not of course venture to order any removals, but there were thousands of vacancies caused by resignation and death and they knew who the Democratic congressman from the district was, or, if the congressman was a Republican, who the Democratic senator from that end of the state was, or, if there was no Democratic senator, who the chairman of the State Democratic committee was, so they knew perfectly well who was to be appointed, and they made out the papers

accordingly and entered the orders on the department journal, and the postmaster-general would sign his name at the bottom of the page and make a hundred orders valid.

The general public knows the first assistant postmaster-general only as the man who removes and appoints fourth class postmasters, but this is only a part of his work. The appointment division is only one of six divisions under him. Another division is that of the free delivery, which has charge of all the letter carriers in the country, and another is the division of salaries and allowances, where the chief, Mr. Albert Scott for many years regardless of the personality or politics of the postmaster-general, has from year to year readjusted the salaries of all the postmasters in the country according to the increase or decrease of the gross revenues of the office, and regulated the money to be allowed postmasters for clerk hire and fuel and lights and rent and twine and letter scales. Within a few weeks the railway mail service, at the head of which is Mr. J. Lourie Bell, lately traffic manager of the Reading railroad, has been attached to the office of the first assistant postmaster-general.

And then there is the second assistant postmaster-general, now Mr. Whitfield, who rose from a clerkship to be postmaster at Cincinnati, who lets the contracts for carrying the mails. Under these contracts the railroad companies get twenty-two million dollars and the steamboat and stage lines get five or six millions. The third assistant postmaster-general has charge of the manufacture of postage stamps and all other materials used in the service and has charge of collecting revenues of the postal service from postmasters, and the always interesting dead letter office is under his jurisdiction. This official is Mr. A. D. Hazen, who rose from a clerkship to his present place, which he held from 1878 to 1887, and President Harrison has re-appointed him because of his efficiency.

The salaries of the first, second, and third classes of postmasters are fixed by act of Congress in even hundreds of dollars in accordance with a sliding scale of the receipts of the office. First class offices pay over \$3,000 a year, second class offices between \$2,000 and \$3,000, and third class offices between \$1,000 and \$2,000. Taking some offices in Pennsylvania, for example, the office at Ephrata, the site of one of the experiments in Christian communism, pays \$1,100; the post-office in

never-to-be-forgotten Gettysburg pays \$1,700; the office in Carlisle, where the experiment of civilizing the Indian children is in progress, pays \$2,200; the office at Meadville, \$2,500; the office at Pittsburg, \$3,900; and that in Philadelphia, \$6,000, which is the highest salary in the first class, and there is only one post-office in the country that ranks as "special." In New York we have Fayetteville, where ex-President Cleveland went to school, where the postmaster gets \$1,100; the office in Cooperstown, in which every reader of the Leather Stocking Tales must feel some interest, pays \$1,700; the office in Jamestown pays \$2,700; the office in Buffalo pays \$3,800; and the office in New York is special and pays \$8,000.

But two-thirds of the postmasters in the country do not get \$200 a year. In fourth class offices if the gross receipts are not more than \$50 a quarter, the postmaster takes the whole and the Government gets nothing; of the next \$100 the postmaster takes 60 per cent, of the next \$200 he takes 50 per cent, and on the excess above that he takes 40 per cent till he gets \$250 a quarter. An enormous number of the post-offices have no business except the opening of a small weekly mail, and they pay a merely nominal amount. In 3,101 post-offices the pay does not exceed \$10 a year; in 8,296 it is between \$10 and \$30 a year, and in 39,197 it is less than \$200 a year. Take for example, the business transacted by the postmaster at East Sharon, Mass., the value of the postage stamps cancelled on letters mailed at this office in three months amounted to \$3.07 and he got sixty cents during the quarter for box rents.

Of the postmasters at the other end of the salary line the numbers are small: one gets \$8,000; five get \$6,000; one gets \$4,000; three get \$3,500; twelve get \$3,000; thirty-five get \$2,500; forty-six get \$2,300; and sixty-three get \$2,000. I do not include in this the numbers getting salaries between these figures; I merely give the numbers in certain classes. Taken as a whole, the postoffice department is a great machine doing an immense business in microscopic quantities. Much the greater part of the postal revenues of the country, amounting to fifty-five million dollars a year, comes from the sale of postage stamps at two cents each.

The unseemly and often disgraceful scramble at every change of the administration for the minor post-offices, resulting frequently in

bitter neighborhood feuds, might be most advantageously obviated in either one of two ways. Postmasters might be elected by the people, or they might hold office during good behavior. There are some objections on the score of expediency to making officers elective who must be responsible to the executive, and if there were no objections on grounds of expediency there would be serious objections of a constitutional character. But nobody pretends that there is any reason why the president and a fourth class postmaster must be of the same political party; and the politicians are beginning to admit that the distri-

bution of the offices among their followers is a source of weakness rather than of strength. Theory and practice are converging toward the condemnation of all that is meant by the phrases "clean sweep," "turning the rascals out," and "the distribution of the spoils." When public sentiment and public interest are in perfect accord a thoroughly efficient and satisfactory postmaster will not be removed merely that his place may be given to some one else, and there will be no rush for places and little of the intriguing that now occurs at such frequent intervals and on so large a scale.

ELECTRICITY AT THE PARIS EXPOSITION.

BY EUGÈNE-MELCHOIR DE VOGUÉ.

Translated for "The Chautauquan" from the "Revue des Deux Mondes."

A VISIT to the Palace of Machines in the Paris Exposition will be attended with a round of surprises for those uninitiated in the special fields represented. Let us enter and observe some of the work carried on here. We will rest our elbows on the balustrade of the upper floor and glance over what is going on below us.

If some perfect idler should happen to stroll into this place, I imagine that this useless consumer of oxygen would experience a feeling of dizziness in making the circuit, so forcibly does the universal law of labor reveal itself. Look where we will in this immense building, machines are running. From one extremity to the other, horizontal shafts are turning under our feet; one might call them the spinal marrow of this organism. Like a plexus of nerves, lines of transmission radiate in every direction, and impart the same life to its thousands of members which are all employed at different tasks; mechanical arms work the metals, weave the cloths, prepare the food, light the lamps; they sew, print, engrave, sculpture; they adapt themselves to all demands, the heaviest and the most delicate.

From the high position which we hold, we cannot distinguish the details of their operations; we seize only upon the confused movement of this crowd of automatons; crank or piston, each separate part follows its own particular design. It is a duplication of the human crowd which circles around

these eight acres and fills all the space uncoccupied by the machinery.

The sight calls to memory the pictures which our childish eyes used to admire in old Bibles—the building of the Ark, of the Tower of Babel, of the Temple of Solomon—those symbolic pictures in which the artists loved to represent multitudes in large scenes of human labor. The diorama of the gallery gives us the impression which those old-time artists excelled in producing, that of the diversity in unity in all labor.

But note how the form of labor has changed; how many times its intensity has increased. Man toils no longer after the old manner, by the poor and rude efforts of his muscles directly applied to a small separate tool. He now hides himself behind a great mechanical slave and governs it by a gesture. By means of these reservoirs of iron and these copper wires he holds captive the forces of Nature, and plays with these subdued powers; he transforms them and distributes them at his will.

Let us first note the work done by steam power. Twice each day the majesty of this gallery is specially marked, the moment when man rouses up and sets at work the force imprisoned here, and the moment when he chains it again. It is noon; the heavy machines are still asleep; all are motionless, silent. A whistle blows, and instantly there comes a great roar from the liberated force. From one end to the other of the gallery it

runs in a few seconds, and communicates its motion to the net-work of wheels. With each wheel the movement differs both in speed and in direction, and each one preserves its own uniform character, that distinguishing trait of human movements. In some it is very slow, but without giving the eye the impression of idleness or weariness; very rapid in others, it never seems violent or precipitate. It is always rhythmic, mild, and soft, with something implacable in its gentleness.

Observe a man gathering up all his energy for a vehement effort, it may be to swing the ax which shall fell the tree, or to strike with the pick which shall break the rock; then look at this piston so regular in its unvarying line of operations. The continued tranquillity of this steel arm is a thousand times more frightful, more inexorable than the momentary violence of the arm of flesh. It is the picture of modern work accomplished by Nature against herself for the service of man.

Six o'clock. Again a whistle blows. Again there comes a roaring from the force which is now to be shackled. Docile, it obeys; it subsides as suddenly as it aroused itself, and goes to be lost again in the elements whence it was resuscitated. The wheels slacken, then stop. Nothing here of the fatigue which is noticed in the arms of the laborer when night causes the tool to fall from his hands; it is rather the sudden reining up of a thorough-bred horse in full gallop when one pulls sharply upon the bits; give him the reins again and he will start off briskly as before. But man has decided that force has finished its day's work; upon this platform where noise and movement amazed us but a moment since, all is silent now; the machines are chained up until tomorrow.

Now let us descend from our observatory and go through some other quarters of this industrial city. First we will visit the department of coal, that old force stored up long ages ago in the bosom of the earth. It was held as a reserve supply to meet the needs of this transition period through which we are now passing until the time when we shall be better instructed in controlling the forces which yet roam at liberty about us. This corner of the gallery carries the imagination to Anzin and St. Etienne—the great centers of the coal trade in France—as all along its

streets ingenious representations of great coal mines permit the eye to look into their depths and to study there the arrangement of the beds, the subterranean life of the miners, and the processes of extraction. We could follow a loosened block of coal to the yard where it is deposited, and then to the canal, and thence to the barge which is to carry it away; we choose, however, not to leave this place of industry in which the coal is transformed into vapor, when its power is felt in all the cylinders.

In another department, occupying the place of honor, three historic glass cases enclose a series of small models. They represent the principal successive inventions of apparatus for the purpose of applying mechanical power to industry, and they bear the names of their inventors from Denis Papin to Foucault. All know that before they were written in this golden book of fame, the names of more than one among them figured in the obituary lists of insane asylums and hospitals. Who could indifferently pass by these cases? Poets, come out of your absorbing reveries and pause here a moment; in these arrangements of wheels and levers, other visionaries have expended as much imagination as a Homer or a Shakspeare in their arrangement of words. Men of deep thought, if it should be suggested to you that meditation stoops from its high sphere when occupied with these practical pursuits, read here the name of Pascal, the master, who worked at the hydraulic press. Artisans from all parts of the world, venerate the names of these good revolutionists, the only ones who have done anything practical for your liberation, who have suffered for you, and have not been false to you.

There are often to be seen in this Gallery of Machinery the grotesque figures of a band of mule-drivers from Cairo, Egypt. They are great peripatetics, great *curiosos*, these childish *fellahin*. When travelers in Egypt wish to sketch the Pyramids they always draw one or more of them at the foot of the monument to serve as a standard of comparison for estimating its height. Without knowing it, they fill the same office here; they carry thought back to the rudimentary methods of labor employed by their ancestors, and still practiced in their native land. And again by comparison with them we measure to the summits reached by human genius in the world of mechanism. Occasionally a Negro

from Soudan is seen in this gallery examining a steam-engine. He would get down upon his knees before it, if he knew how much he ought to bless this mechanical slave which has been substituted in his place. We now put these engines into the space between the decks of ships instead of the cargoes of black flesh which were formerly carried there, and send them to all the markets of the world where there is a demand for the work formerly done by the Soudanese.

A little distance from this apartment are those devoted to hydraulic motors, to gas, to compressed air, and to petroleum. The last is a new-comer of great ambition, and of great promise for the future. It is only fifteen or twenty years old, and it aspires to the conquest of the industrial world for the benefit of its two countries, America and Russia.

At the western extremity of the gallery we come upon the vast and rich exhibitions of railroads, such as are in keeping with their strong and powerful management. Here steam, the productive power in all the former mentioned machines, becomes a messenger, and carries in all directions the productions of the other engines. This exhibition is among the most interesting; on the upper platform the engineers in this service have gathered the evidences of their constant labor for the perfecting of the means of transport—plans, pictures, models, new assurances of rapid and safe travel. One is even disquieted—paradoxical as it may seem—at the thought of the ease and comfort the future traveler may enjoy. Let us admire these numerous types of carriages, convenient, spacious, elegant. They seem even to portend a reformation in the penitentiary-like vehicles in which are habitually carried throughout France the prisoners of travel. Let us admire them before the companies take them back again into their dépôts. Sceptics declare that we shall never see them again, but, perhaps, our grandchildren—if they should live to be very old—may.

My companions would not wait if I attempted to pass in review all the applications of force shown here. I have heard competent men say that the machinery offered nothing new or instructive for the specialists at this Exposition. That is possible, but all is new to those who do not know it. One invention at least is novel, and arouses great hopes in regard to one of our national industries; it is

the attempt of Mr. de Chardonnet to fabricate silk from cellulose. That which the silk-worm does with the mulberry leaf, capillary tubes do here with a solution of the fibers of the fir tree; they secrete a gossamer-like thread, which is wound on bobbins. The inventor's display justifies his assertions, for it contains pieces of cloth woven from the thread. If the process proves practical, which will soon be decided, China will no longer have cause to boast, and the Lyons fabrics will find their first master in the nearest forests.

At least this would be the case if the forest is not first stripped by the paper-makers. These workers seem to have plotted to metamorphose nature into reams of paper. Trees, cereals, vegetables, and flowers, all the produce of the earth, they throw into their boilers, and all are transformed into the endless roll which the printing-houses devour. In their great vats all sorts of substances are reduced to a paste and rolled out into great white sheets for the exigencies of journalism.

A constant crowd stands round these paper mills and the adjacent printing-press, and I well understand the attraction for the curious. No sight is more of a revelation. A fluid, pulpy in substance, flows out from the first reservoir, in successive falls it becomes first foam-like, then a thin film, then a sheet which the cylinders seize, roll, dry, stiffen, and finally pass over to the printing-press, which converts it into the morning edition of the newspaper. Thus in a few minutes that fluid became an organ of opinion, a popular instructor, a great judge, the most effective power which exists in this country.

We will now go to gallery No. 62, that devoted to electricity, the great, the incontestable novelty. On account of the revelations made here concerning it, the Exposition of 1889 will mark an era in the history of the world. Fifteen years ago I found in a little workshop in Paris a Russian inventor who was trying to work out into practical form an idea. The inventor was Mr. Jablochkoff, and the idea, the establishment of a system of electric lighting. Some difficulties bothered him, but he was full of confidence in his final success. Some time later the Jablochkoff globes threw their brilliant but softened light over many parts of Paris, and by successive improvements they now stand unrivaled. It is almost the only light used on the Champ de Mars, and it is found in all

parts of this miniature world, as it soon will be found in the real world.

By a single glance over the large space reserved for the display of electricity we can correctly judge of the rank it holds in the industrial domain. Let us first examine this machine, which, both by its form and its office, reminds us of the steering-wheel of a ship. It is the dynamo, the most common type of the electro-magnetic machine. It can exert a two hundred fifty horse power; that one at a greater distance from us will furnish a power equal to that of five hundred horses. Great or small, we shall find these machines, consisting of a couple of bobbins under their armature of coiled wire, scattered everywhere. They are mingled in with the heavy steam-engines, they insinuate themselves among the fly-wheels, and seem entangled in the bands and wires, like an invading army resolved to conquer these colossal forces so long in possession of coveted territory. Nor is this simply a figure of speech, it is the actual tendency of electricity to undermine all other forces. It is more subtle, more easily controlled, more similar in all points to the nervous force of man. According to those who have studied it most, electrical energy is spasmodic, but in operation it is easiest managed. Like human energy it is capable of making intense applications, but they are followed by reaction. If work beyond its strength is demanded of the dynamo, it will give it, but it soon shows that it is tiring. One could easily imagine it endowed with human intelligence, for it suits its efforts to the varied requirements made by the circumstances. In case of necessity it will develop a power double or treble that warranted it by its constructor, but it very soon flags and gives out, just as a person would do.

For very many industrial usages the dynamo has already been interposed between the steam-engine and the machinery employed in special trades. It maneuvers the wheels and axles, the capstans, the drive-hammers, river machines, and perforating machines. Electricity solders metals, and turns the revolving bridges over our heads; here it is the propelling power of carriages, there it turns the screws of a boat. I recall its applications to acoustics—the telephone, the phonograph, instruments already popular and promising great things for the future, which we have seen in operation here among the exhibitions made by Mr. Edison.

It is at work everywhere in this gallery, and at the same time is making its power felt in work carried on in distant departments. Since the attempts of Mr. Deprez, the practical researches of electricians have had for a principal object the transmission of its force for mechanical work at a distance. An example of it is at hand. A dynamo from this gallery transmits to its twin sister placed in the agricultural section more than half a mile distant, the force which the latter distributes to the machines used there. Over this short route the loss of energy is almost nothing, not more than six or seven per cent. Let us go there and watch the reception of the force which we have seen generated here. We find the electricity threshing and fanning the wheat in machines which look as if they alone would require all the force transmitted, but which in reality take only a small part of it. Just beyond in a saw-mill joists are being cut out, and with each blow the consumption of the force is doubled; but it is not found necessary to ask from the Champ de Mars a supplementary transmission.

We have just seen that the dynamo to-day derives its energy from the steam motor. Attached to the latter it receives from it the generating power which is vastly increased in its wire coils. Steam serves electricity now in its transition period. It is hoped that soon it can directly depend for its generating power upon the great natural sources, such as water-falls and large streams at first; and later that it will learn to seize and to transform other elementary movements which are in action upon the surface of the globe. Already realized in Switzerland, and even in some parts of France, in mountain regions where the water-falls are near and powerful, this water motor is elsewhere forbidden by the difficulties of detail.

Electricians are unanimous in affirming that they will soon triumph over all obstacles. When one talks with them one gathers the following impression: they have worked in silence for many years, struggling against difficulties which seemed insoluble. The time has now come in which they feel that they are masters of their domain, and are upon the eve of new discoveries, the results of which will be incalculable. Their faith predicts, and very shortly too, a radical revolution in the means of locomotion, in industrial machinery, and, consequently, in the economic conditions of labor. I will refrain

from relating in detail their hopes ; for in according even the smallest space to their astonishing prophecies, I fear I should run a risk of casting a doubt over the considerable conquests already made.

I ask pardon for such an array of technical details, still little understood by the most of us ; but such was the case among our fathers not so long ago regarding the new ideas about steam, which to-day are so familiar to us. Our eyes, our minds, and our language have become accustomed to the locomotive, to all of its organs, and to reports concerning it. Thus in the near future every one will be familiar with the usual types of the dynamo, with the action of its currents, with the excellent nomenclature of a science which borrows from illustrious ancestors its denominations, as amperes, volts, etc. If I have delayed too long in this marvelous gallery, No. 62, it is because so many suggestions regarding general philosophy are made here which satisfy the intelligence.

The other evening, before I made my first visit to the Palace of Machines, I read anew "Prometheus Bound," that sovereign drama into which Æschylus has thrown all the philosophy, all the grief, of humanity. When I entered the great iron nave, inundated with light, and trembling under the influence of a mysterious power, it seemed to me that the book had again opened itself before me, or rather that the drama was being enacted. The leading characters were in the scene—

Force, Strength, and the immortal Prometheus, in whom the tragic Greek incarnated at once science and man. Hephæstus, the blacksmith of the gods, who riveted the "indissoluble chain" which bound the divine Prometheus upon the rocks of Caucasus, had changed his form, but I could readily recognize him metamorphosed into a monster of steel, and still poetic. I beheld the plastic fire, that "gift of the god to man," which revealed to him all the arts, no longer in a hollow tube, but now gleaming along these wires. Prometheus has robbed the heavens a second time, and now his gift to men is more subtle, more powerful, more helpful, than of old. This time he is not punished for his deed.

Ah me ! I am mistaken. It was not "Prometheus Bound" which was being played before me ; it was the other drama of the same poet, so long lost, but found at last here, the "Prometheus Unbound." The Titan is now of one accord with Strength and Force, he does not suffer through them, but employs them in his works. Or rather in his turn he binds them with these frail magnetic wires, and they put in operation for man's benefit the divine fire which he stole for them. And the Chorus which formerly bemoaned the heroic criminal for having loved mankind too well, will henceforward sing another song in which they will kindly regard Force, which is no longer to be distrusted, but to be welcomed as the deliverer of the human race from the most irksome forms of toil.

IN ARMENIAN VILLAGES.

BY HARRIET G. POWERS.

SOUTH of Trebizond, on the Black Sea, a wilderness of mountains guards and yet leads up to the lofty table-lands of Armenia. These are broken up into valleys and small plains by mountains again. This ancient country, whose people proudly point you to Togarmah the grandson of Japhet and father of Haik, as their ancestor, lies in latitude south of Naples ; but as one swallow does not make a summer, so one fact should not lead us to judge that its climate is a southern one. Its inland situation and especially its altitude must be taken into account. These table-lands, being five to seven thousand feet above the sea, it naturally follows that the

climate is cold, and the winters long—the snow falls early and keeps on falling. I have seen deep snow on the Erzroom plain in the middle of April, and the same year we had quite a snow-storm early in June. Of course this was exceptional. It sometimes happens that the first white snow-flakes of the autumn fall upon the soiled and ragged patches of snow which have lingered on the hillsides all through the summer months, growing visibly smaller, but not wholly disappearing before winter sets its seal on the land once more.

We travel for hours over treeless and desolate mountains, or treeless and seemingly deserted plains. But unexpectedly a thin veil

of smoke hanging over what looks like mounds of earth comes into view, the fierce barking of dogs is heard, and, lo, a village is at hand. As we pass through a labyrinth of narrow lanes and alleys, or over broad, spongy beds of manure, a chorus of barking dogs before us, or springing toward us from unexpected quarters, it seems more like pandemonium than the haven of rest toward which our thoughts have turned longingly. The cone-like piles of *tezek* rise higher than the eaves, and the hay-stacks are still taller.

As the roofs of nearly a whole village join and form one irregular expanse of earth diversified with holes, rudimentary chimneys, and so forth, a stranger has no idea where a house begins or ends. I should like to see any one make out the plan of one of these burrows—the name most suitable for them. The roof is the side-walk of the village, and is especially affected by strangers as being freer from the savage dogs which keep guard about the door-ways. Sometimes the slope from the ground is so natural that horses and cattle pass over it; especially is this the case when snow has fallen. I once saw a horse that was prancing about on a roof, narrowly escape prancing into the chimney hole,—of which the rider was fortunately in blissful ignorance. Dreary as the absence of inhabitants often seems, the idea of life in such abodes is even more desolating.

In building a house an excavation of several feet is made. Then the walls are built of stones laid up in mud with sometimes a mere suggestion of lime. These walls rise to a height of about six feet above the ground outside. Trees brought from a great distance are set up as pillars and the branches are used as rafters; on these are laid smaller and smaller branches and finally the whole is covered with a layer of earth. The largest apartment is a stable where buffaloes, a few cattle, and several horses and sheep are sheltered from the winter, sometimes scarcely going out the whole season.

The building is entered by a long dark passage; near the end there is a door, with a heavy weight which makes it slam to when released. Push this open and step over a very high sill; the incline before you leads to the floor of the stable. Around the walls runs a manger in front of which cattle and horses are tied, and stand or lie down at their pleasure, sometimes it pleases them to kick their neighbors and make a general dis-

turbance. If you turn to the left from this incline and ascend several steps you enter the *oda* with a dais on each side and a fire-place at the further end where pieces of *tezek* are smoldering. Hay is spread over the dais and covered with black, gray, or brown felt. Sometimes a handsome Persian rug is added.

This *oda* is a social center for all male gossips; in this respect it suggests a country store, but there is nothing to sell; or a bar, but that nothing stronger than coffee is offered to drink. Every one lights a pipe or cigarette, and the atmosphere is soon blue with smoke, and the stable odors are quite neutralized. The venerable head of the patriarchal household spends much of his time in the *oda*, often spending the night there. Thus he is ready when any traveler happens along in search of shelter and food, to offer him hospitality, and in return get news from the seat of war, from Constantinople, Egypt, or any other region, from which the traveler brings tidings. He the host thus learns of the latest robbery on the Bayazid road, of the death of the Vali pasha at Erzroom, of the state of the crops in the Khunnoos district; the traveler is, in short, the country newspaper.

The family room is entered either from the passage, or the stable, or both. It is a large room with an earthen floor. The ceiling is formed by timbers laid up on the walls, cob-house fashion, every course a little nearer the center, and finally a hole is left for light and air; all is now rounded over with earth into a kind of irregular dome. Directly under this hole is the *tonceer*, or fire-hole, two or three feet deep, and two feet across, lined with clay. This is the sole apparatus for heating and cooking.

We have seen no woods, we are told there is no coal. What do they do for fuel in this region where winter reigns half the year? The stable is the coal mine or forest from which they draw their supplies. In the first place the heat radiated by the cattle keeps the *oda* thoroughly warm the whole season, and more or less affects the rest of the house. Then, every spring the manure heaps outside are stirred up, men and women turn up their trousers and treading straw into the mass, finally make it up into round cakes a foot and a half or more in diameter. These are dried in the sun and then stacked in hollow cones outside of the house, and behold your winter fuel, your *tezek*. It burns something like peat and will smolder long before going out.

What of the people who build these houses

and are here born and bred, here wed, work, and die? At first they are strikingly and unpleasantly different from ourselves, dark, shaggy, coarse, clad in uncouth garments, speaking a strange and uncouth language. But when you get close enough to tear away the veil of strangeness which hides the real humanity beneath, we find them possessed of like passions as ourselves. Some are amiable, some have tact, more get into trouble with one another. They know how to fall in love and, occasionally, to elope. They know no chemistry and have no idea of art, but they can generally speak several languages. They cannot write, but they can remember. They suffer, they enjoy, they have their jokes, pretty broad to be sure, sometimes, and their amusing stories at which they laugh as heartily as Americans. The laughter and jokes are generally masculine, for the majority of the women have too many cares and children tugging at them to be able to enter readily into merriment.

Armenia is represented as a female figure, weeping among ruins. Well may she weep, for the lot of her children has been a hard one and her scepter has long since departed forever. Yet her people cherish the names and deeds of her heroes in verse and song; no word is sweeter to them than *Haiasdan*—Armenia. The very word will sometimes start the tear. Think of us weeping over the words United States. Was there ever a name so practical and devoid of sentiment? America? Columbia? Yes, but United States—you cannot start a single emotion with that.

One autumn I spent considerable time in the village of Komatzor, the fold valley, or the valley of the sheep-fold. As I sat by the dilapidated sheet-iron stove of native manufacture, the door creaked, announcing a guest, and in came Mariam. She was a large, fine-looking woman, and since her husband's death had an emancipated air which well became her. She was dressed in a thick, native gingham, striped in bright colors, which hung in three separate breadths showing, as she moved, the full trousers beneath; a short jacket of dark blue cotton which just reached the top of the gay yellow girdle; and a pair of coarse, faded red shoes, of no particular shape. She wore a curious head-dress; first a wooden frame, shaped somewhat like a Glengarry only higher in front; this was covered with two thin handkerchiefs in dark colors and large dull patterns. The first of these covered

the front and top of the curious bonnet; the other folded into a triangle was laid over the top, the right angle falling behind, while the acute ends were crossed over her chin and brought up and tucked in at the cheeks. *Parev*, was her informal salutation—a wishing one well. *Parev*, I replied as I made room for her beside me on the wooden bench.

"Can you make some calls to-day?" she inquired. "Yes, I should be glad to," was my ready response. "The kyahya's wife asked me to take you to see her. Shall we go there first?" (The *kyahya* is the chief man in the village.)

We picked our way through alleys of mud and over hummocks of manure till we finally took to the roof of the village, and followed this to our destination. We entered an out-house between whose low stone walls was packed a flock of sheep through which we made our way. Mariam had to lead for it was so dark that I should never have found the next door by which we entered the *doon*, or family room. Here we stepped out of our shoes, in my case over-shoes, and found ourselves in a large bare looking—space describes it better than room. There were no windows and it was but dimly lighted from the hole in the roof. Against the walls stood piles of comfortables and wool mattresses, several cradles, and great clay bins for flour and various preparations of wheat and other stores. Above the bins were shelves containing a few coarse, earthen dishes, and a few copper plates and sauce-pans, well tinned.

In the center of the room several women were sitting around what seemed a stool with a dingy comfortable thrown over it. We were invited to join them on cushions placed for us, putting our feet under the edge of the comfortable where they were soon sensible of a genial warmth, for the stool was placed over the *toncer*. The fire is lighted in the morning; the smoke arises in volumes and escapes by the hole in the roof if it can. Most of it, however, loses its way and becoming discouraged, attaches itself to the rafters, painting them a shining black. Once heated, the *toncer* remains so for hours. The room was tidy, at least it had been swept, and that, too, before our arrival. They often wait till we are already there, I suppose to preclude any doubt on our part. Children ragged and not too clean swarmed around us. The mother-in-law was dead, and the wife of the eldest brother (she who had invited us)

was the feminine head of the household, consisting of the old father, three married sons and their wives, a younger son who would soon be married, the yet unmarried daughter, and a flock of grandchildren.

We sat cosily about the *toneer*, all but the hostess, who was what is unusual, a bustling hostess. I have often envied their imperturbability in entertaining; their philosophical calm even when things go wrong. The mistress of the house where I often stopped was a nice housewife; very tidy and a good cook, although she had little enough to do with, according to our ideas. She had a raw, stupid girl to help her, very slow, and possessed of the remarkable name of *Shakar* (sugar). Poor Pompish Zumrood used to get so exasperated with the girl, yet her tone never rose above the usual key, neither was her brow corrugated with frowns. I shall never forget the amusing and pathetic contrast between her tone of voice and the words she used in trying to hurry the girl. *Shaka*, she would cry out, *shoo—d, shoo—d*, drawing the word out till it did not seem possible that it could mean "quick."

But to return to our call; we succeeded in being very sociable and they asked many questions about America, showing as much ignorance of America as—well, as the majority of Americans display about Armenia. By the way, what a pity that *Armenian* differs by but one letter from the theological term *Arminian*, and that in writing it may look so like *American*. It is very confusing.

Finally we rose to go. "Oh, no, indeed," cried our hostess, "you must sit right down again and have some tea." This is an unusual treat in a village. We re-seated ourselves while she brought out a tray containing small cups, not too clean, by the way, and a common china teapot, which she filled with hot water. When she thought it sufficiently steeped, she put a lump of sugar in each cup, and tilted the teapot. Hot water, pure and simple, poured forth. "Oh," she exclaimed, "I forgot to put in the tea." "But never mind," she added cheerfully, filling up the cups, and passing them around. She was equal to the emergency, after all! There was nothing for us to do but politely receive the sherbet and drink it, unflavored though it was, only too thankful that there was so little of it.

In the Khunnoos district we found the

same collection of huts huddled together. About the low doors hung strings of red peppers drying in the sun, giving the only touch of beauty to the scene. Yet in these houses, these heaps of earth and stone groveling so abjectly, we found young girls embroidering woolen aprons which are a marvel of quaint patterns and coloring.

We were invited to dinner one day. We groped our way down the usual dark passage to the stable and ascended to the *oda* by several stone steps. As we sat about the table (a stool supporting a large round tray) an old white horse standing near flicked me occasionally with the end of his long tail. But we had a savory and elaborate dinner, if it was served in a stable. There were eight or ten courses prepared by the women and handed successively to one of the young men, sons of our host, who acted as waiter. The father was the only one who sat with us at the table. None of the others would have consented to join us; it would not have been showing proper respect and they would have felt out of place. Even the pastors' wives we seldom persuaded to sit down with us, especially if "we" were gentlemen. They always insisted that it was much easier for them to eat quietly by themselves when it was all over. Another reason was that if the mother came, the little children did also, and it was not always agreeable to have their fingers thrust indiscriminately into this or that dish.

Our host was a fine-looking old gentleman, full of humor, and had at his tongue's end many amusing anecdotes current among the people, turning the priests into ridicule. Here is one that is double-edged, aiming at the ignorance of the people as well as at that of the priests. I must here explain that dark blue is a color that is used by the priests; it happens also that it is in general use in the Harpoot district. One day a man habited in dark blue appeared at Boornaz. The people, supposing him to be a priest, asked him to discharge the priestly office. He hesitated, but was finally persuaded to do so, although he did not know how to read. They took him to the church, invested him with the surplice, and he performed the service, intoning over and over again, *Samson yellah has-sah Trebi-z-o-n-d* (I left Samsoon and arrived at Trebizond), to the perfect satisfaction of the people. After a while the *vartabel*, one of the higher clergy, came to Boornaz

and called on the new priest to perform the service. *Samson yellah hassah T-r-e-b-i-z-o-n-d yev Boor-n-a-z* he chanted. "What kind of a priest is this you have?" inquired the indignant *vartabed*. "Do you call this preaching?" and he tore the surplice from the priest's back and drove him out of the church. The people who were very fond of him and aghast at the idea of losing him, upbraided him, saying, "Why did you add Boornaz to the service? Was it not well enough before? Why have you made all this trouble?" "Ah, well," he replied, "never mind what the *vartabed* said. But let me tell you that he is a saint, and when you go to see him each one of you pluck a hair from his beard as a relic." The people did as he directed and the poor *vartabed* fled almost beardless, exclaiming that priest and people were well suited to one another, and cursing them all together.

Just at dawn every day we heard the call to prayer drawing nearer and dying away in the distance. "Come to prayer," summoned the voice, as it passed slowly up and down the alleys; "blessed be God and may He have mercy on your parents," thus calling all good Armenians to begin the day with an act of filial piety in putting up a prayer for their dead.

There are several queer old churches in this vicinity. One in Chevirmeh, though small, presented a very respectable appearance from outside. On entering, however, you find yourself descending into a crypt, about as pleasant a place for religious services as the catacombs. The churchyard is full of graves distinguished by peculiar stones. I supposed that it was a rude attempt at representing the body of a horse. But a traveler (Curzon, I think, in his "Armenia" which, by the way, is a very entertaining little book) speaks of singular monuments such as distinguish most of the old burial places in Armenia—stone models carved in the form of a ram. These Chevirmeh "rams," however, are entirely without horns.

In visiting this district we often passed the first night in the village of Hertev, and generally at the same house, monopolizing the *oda* for the time of our stay. One of the girls of the household happened on one occasion to be standing outside when we arrived and greeted me with a smile. It quite went to my heart as, weary in body and soul, I was helped off my horse. So after resting a bit I

went to the *doon*. The women scarcely knew what to make of it, but were very cordial when they found that I really had come to visit, and put a cushion for me near the open *toncer*. "She keeps a veil over her face when riding. Look at her," exclaimed a young girl to one of the others. "Is that the face of a traveler?"

The girl's forehead was festooned with strings of coin which hung down by either cheek; she wore ear-rings, also, and quite a number of bracelets and finger-rings. I asked how many daughters-in-law there were, supposing that she was one. I should have remembered that if this had been the case she would have been veiled; and would have had none of the free and easy air of being at home. She was engaged (therefore the bravery of her ornaments) to a man in another village. They asked my name and made unsuccessful efforts to pronounce it. The married woman, who in the meantime had with a long wooden spoon fished up an egg from the hot ashes at the bottom of the *toncer* and given it to her little boy, said that our names were very difficult. I could not help smiling as I thought of our encounters with their gutturals.

When they found that I was unmarried (they always find that out the first thing and take a very direct way of doing it) the next question was,

"Are you never going to be married?"

Not to show any want of respect to the married state I guardedly replied that I did not know; I was too busy at present.

"Oh, but you should get married," counseled the woman.

"Is it a good thing?" I asked, to see what she would say.

"Yes," she replied with great deliberation and emphasis, "it is."

"But some say it is not, and advise me never to marry."

"They deceive you," she exclaimed eagerly; "it is far better to marry."

Behold the Armenian woman's answer to the question, "Is marriage a failure?"

"But if I marry," I pursued, "who will take care of the school?"

"Look out for yourself, and let the school do as it can," exclaimed one of the girls.

As I have already indicated, the scenery is wild and mountainous. There are, to be sure, level plains and gently sloping valleys, but the mountains are always in sight, rugged,

gaunt, unclothed with forests, solitary and dumb. This sounds very well, but alas for us when we have to make closer acquaintance with these same grand and majestic mountains, steep, stony, with narrow paths skirting frightful precipices. Yet when you reach a summit where you have a level foothold, at an elevation of perhaps nine or ten thousand feet above the level of the sea, there is inspiration in the extended view; in the cool, rare air, if you have wraps enough; in the little hardy flowers blooming so sweetly far from the haunts of men; in the surprises of rain, sunshine, and snow, or hail which may greet you in the hour you rest and lunch. Yes, it is inspiring *if* you can forget that you have to clamber down just such a road as you have come up.

The Armenians have Mount Ararat within their borders, but not satisfied with this, they claim also the site of the Garden of Eden. Passing Kuzzul Vank (the scarlet monastery)

one can look down upon the sources of the three rivers flowing respectively into the Persian Gulf, the Black Sea, and the Caspian; doubtless we could with a little searching find the fourth river. The Turks explain the desolate appearance of the country, which they acknowledge was once like a paradise, by saying that when Khosrof Purveez ruled over this region Mahomet sent him a letter calling upon him to give up the faith of his fathers and promising him protection if he would embrace Islam. The powerful Persian monarch, indignant at the offer of protection from an insignificant pretender, as he considered Mahomet, scornfully threw the letter into the river. Nature dismayed, at once withered her flowers and trees, the river shrank, and cold and frost set in.

And so Armenia is no longer the Garden of Eden; but the Armenians feel that next to living in the Garden of Eden is living where it once was.

THE MODERN THERMOMETER.

BY ERNEST INGERSOLL.

THERMOMETERS are as old as human sensibility, for every man, woman, and child carries one in those specialized sense-points which inform us of heat or cold in contact with the skin; and this perception—this human thermometer—is often close to accuracy, and practically of as much value as a mechanical device. In dyeing, for example, many colors depend for precision of tint, when applied to textile fabrics, upon the exact degree of warmth under which the application is made. To test his prepared liquid the dyer plunges his hand into the mixture. He can tell to a nicety when the required heat has been obtained, remembering what it ought to be.

Who was the first to make a mechanical thermometer no one is able to say. Admiring pupils ascribed it to Sanctörini, Galileo, C. Dibble, and other masters of that impulsive age in Europe; but none of these men claimed the invention for themselves. Whether it had one or many origins, its development has been no more rapid than that of most other of our household appliances, perhaps because one of the most serviceable forms was hit upon at the beginning.

One may easily fancy that Cornelius Dib-

ble, of Alcemar, in sheer weariness of hearing his neighbors discuss the weather, sought some means of settling the question when he produced his "weather-glass." It was only a bulb blown at the end of a long wide tube, and inverted into a tumbler of liquid. Variation of the air within the bulb and tube under a change of temperature would cause the water within the lower end of the tube to rise or fall compared with the surface of the rest of the water.

Though for various reasons the weather-glass did not come within ten degrees or so of accuracy, it was a good beginning, since it embodied the principle upon which all thermometrical contrivances have been based ever since, namely: the expansion of substances under increasing, and their contraction under diminishing, temperature. The air expanding under the influence of warm noonday forced the liquid down in the weather-glass; the cooling of nightfall caused it to contract and the water rose to fill the vacant space. Forty years later Boyle turned the weather-glass upside down, and by reducing the liquid column to a small index greatly lessened the liability to error.

It was soon perceived, however, that the changes in the air were not exactly co-ordinate with the changes of temperature, since density and other atmospheric conditions introduced variations. Early experimenters, therefore, soon tried various liquids, and mixtures of gases and liquids, inclosed in tubes and bulbs of glass more or less like those of the weather-glass. Alcohol was highly recommended, for its range of dilation and contraction is not so wide as that of air, and it does not solidify under any known degree of cold. Alcohol, however, would boil and turn to vapor at a lower point than any other substance, and hence was useless for measuring high degrees of heat. All the early men seemed a good deal more interested in maximum cold than in supreme heat, not being anxious, perhaps, to contribute any additional intensity to the quite hot enough theology of their spiritual censors.

What was wanted was a substance which should have the characteristics of neither a solid (which expands too little) nor a liquid (which is useless at high temperature) and yet not be a gas, which expands too much for ordinary purposes. This *desideratum* was found in mercury in 1692 by Dr. Edmund Halley, a member of the Royal Society of England.

Mercury follows nearly the same law of expansion as gases, possesses a wide range of liquescency (solidifying only at 39.8° F. and boiling at 640° F.); has a low specific heat, but a high conducting power; and can be obtained in a state of almost absolute purity. These are advantages for the end in view, combined in no other substance.

The thermometer has been given about as many forms as there can be made curves and branches in a glass tube or set of tubes. When liquids first took the place of air, the top of the stem was still left open, but before long the air was wholly excluded from both bulb and stem, and these were hermetically sealed at both ends. At first every maker had his own scale and no two agreed. This was complained of by investigators, and attention was quickly turned to settling the confusion. The unchanging temperature of underground vaults, and the boiling points of a variety of substances served as fixed points.

Gradually, in the survival of the fittest, the three scales which we now know—Réaumur's, the Centigrade, and Fahrenheit's—drew ahead of their competitors. The Réaumur

scale, however, suffered by a curious oversight. After having first fixed his zero point in melting ice, and his temperate point in a deep cavern, he fixed the boiling point of water by placing his spirit thermometer in boiling water. The alcohol, heated to its own boiling point, at a temperature considerably lower than that of water, of course remained stationary at 80° ; and this our very careful Member of the Academy marked, without ever looking to see whether the *water in his pot* bubbled! The error has long been remedied, but a scale remains, marking eighty divisions, or degrees, between melting ice and water boiling at the level of the sea.

The Centigrade scale, devised by the Swede Celsius, differs only in dividing the distance from freezing to boiling water, into 100° . Fahrenheit's, the scale common in North America, Great Britain, and Holland, puts 212° between these two points, and places "zero" 32° below water-freezing, because, says tradition, that was the lowest point marked by the Dutchman's standard thermometer, when "exposed to an intense cold in Iceland in 1709"; but this is incredible, because zero-weather would be by no means intense for Iceland in winter.

Thermometers are mounted in a great variety of forms and range in size from ten feet or more in length to the tiny clinicals of three inches. But the greater number consist simply, and essentially, of a straight tube of glass, about the size of a lead-pencil and from twelve to twenty inches in length.

The making and graduation of these is attended in each factory with secrets of manipulation which it would not be fair to divulge even if known to the writer, since upon these points of constructive ingenuity and excellence each maker relies for his foothold and success in the keen competition between him and his rivals. Some makers, by the way, confine themselves almost wholly to instruments for scientific research, or for observation in arts and trades outside of medicine, while others devote their energy to clinical thermometers mainly. The cheap, tin-cased thermometers sold in every store and on the street, are made by establishments, chiefly in New England, which turn them out very rapidly, and they are often three or four degrees out of the way; but for a dollar may be purchased a thermometer true within a degree. Most, even of the cheaper, clinical instruments are as close or closer than that,

while those of the best makers register within a quarter or even a tenth of a degree. Fine scientific instruments ought not to vary more than three hundredths of a degree, and a part of this may be calculated away by allowing for the effect of well understood influences.

Now how is a thermometer made? and what constitutes its excellence?

The glass first comes from certain factories in the form of long tubes, or "canes," having a very small bore in the center, and an opaque white strip down one side for the markings. The quality of the glass is most important, and only that kind known as "flint" can be used successfully, because that contains the most lead. It is needful to have a glass with the least possible liability of changes under changed conditions of temperature; and at the same time one which when it expands and contracts shall do so with the utmost uniformity. As the lead is the element in glass most evenly affected in this way, the more of it in the composition the better. For the finest standard instruments, a different glass is usually used for the bulb than that of the stem; but if makers were obliged to restrict themselves to some one article, the choice of nearly every one would fall upon Powell's English flint. The German and French glasses come next; but an American factory, at Corning, N. Y., has long supplied a product for this special trade, which is very largely consumed by American instrument-makers and opticians, and which in straightness and uniformity of bore is superior to any of the imported stems.

The bore of the canes is supposed to be uniform, but actually comes far from it. Each cane is tried by passing mercury along it, and sections of greater or less length, here and there, where the bore is quite or almost uniform in caliber are cut off and saved for standard instruments, while the greater part of the remainder is serviceable only for those of an inferior quality.

The next step is to blow in one end of each selected tube a small bulb, which may be globular or elongated, and which opens into the bore. The tube is next filled with mercury, which is then held in a flame of a lamp until it boils, expelling any globules of air that may have intruded. The tube is then suddenly upset into a bath of mercury, which instantly rises to fill the vacuum. (This is one method; there are others.) The tubeful of mercury is again heated under a retort until so much has evaporated that only a little

more than enough to fill the bulb remains, whereupon the top of the tube is melted and hermetically closed. By this process every particle of air and moisture has been expelled and will forever be excluded. The tubes are then laid away to "season" for from one to three years.

Let us suppose this delay at an end, and the maker proceeding to finish this instrument, intended, perhaps, for some meteorological station. His next step is the important one termed "calibration."

Examined under a microscope, the best tubes will be seen to have bores of unequal caliber, widening and narrowing by infinitesimal amounts, to be sure, but enough to spoil that exactness essential to any instrument of precision. The tube—which ought not to have been exposed to a higher temperature than about 77° Fahrenheit, before that time—is placed for forty-eight hours in melting ice, and the point where the "index," or surface of the column of mercury, becomes stationary, is etched upon the glass under the microscope. Then the tube is immersed for several hours in the steam of pure water at a barometric pressure of 760 mm.=29.922 in. (reduced to 0° C.) at the level of the sea and in the latitude of 45°. This latitude is approximately that of New York, the correction to be applied, as compared with the latitude of the Kew standard (London), amounting to about twelve hundredths of a degree. This standard is probably within ± 0.03 C. of the perfect gas thermometer between 0° and 100° C. The exact difference is in process of determination.

Two fixed points have now been ascertained, and if the caliber of the tube were mathematically exact, all that would remain would be to mark off the intervening distance into exact hundredths in the case of the Centigrade, or into 180° for the Fahrenheit scale; but as a matter of fact the caliber is never true for more than short distances at a time, and the proper length of each degree-space in the graduated scale must be apportioned according to the space each one hundredth, Centigrade, or one hundred-and-eightieth, Fahrenheit, of the whole column of mercury, will occupy; that is, the division of the stem-length is into equal degree-quantities, rather than equal degree-spaces.

The most approved method for this is by bisections. The exact stemful of mercury, from the ice to the boiling points, is divided into two absolutely equal halves of volume,

and the point in the tube to which one of these halves reaches (always one side of the space-center) is marked. Then the half, and quarter, and so on, of each of these subdivisions in succession is bisected and measured in the same way, under a magnifying glass and with the aid of measuring apparatus of great delicacy and precision, until every degree-space has been determined, according to quantity. Standard thermometers thus prepared probably contain an error of less than two hundredths of a degree, Fahrenheit.

Granted that the mercury be chemically pure, the tube entirely free from air or moisture, and the calibration perfect, two other serious sources of error are in the glass itself.

Hard as it appears, glass is really of a consistency like that of lead. The makers of the object glasses of telescopes find that their surfaces change in other parts than that where the grinding is applied; they also observe that the surface "gives," as though it were putty. In the thermometer all of these peculiarities are felt. In its manufacture the bulb is heated to near the softening point. It cools more or less suddenly, and internal action is set up in the substance of the glass, which does not cease for a long time. The bulb, and to a less degree the stem, of a new tube shrinks with age, rapidly at first, then more slowly, but ceasing only after two or three years have elapsed. This change may cause a variation of half a degree in a hundred, so that the mercury in a thermometer graduated when new, will rise to 213° Fahrenheit, for the boiling point, when tried two years afterward, showing that the bulb, or the stem, or both, has been contracted.

When an old thermometer has been laid aside for six months or more it will be found to have lost accuracy by elevation of the zero,—a change, however, which is gradually reduced with use until the normal correctness is restored. This "depression," in thermometers made of ordinary glass, may amount to the loss of a whole degree in capacity, between the freezing and boiling points. No very satisfactory explanation of the change in the glass is at hand; but physicists say that there seems to occur a partial separation of the crystalline from the amorphous constituents.

Mr. Green, of New York, after long study, has compounded a glass of chemically pure materials, which not only underwent a surprisingly small amount of change with age, but was subject to only 0.08 , Fahrenheit, of

depression from the boiling point after six months rest and forty-eight hours in melting ice, as compared with 0.995 , Fahrenheit, in the case of a thermometer of ordinary optical glass. From this special glass the bulbs of his standard thermometers have been made for several years; but lately a glass of the same properties has been invented for the fixing of weights and measures.

Thermometers take a great variety of forms and are adapted to a long list of special purposes besides the observation of the weather. Meteorological instruments are designed for indoor and for outdoor use, and some are self-registering. The maximum thermometer, for instance, pushes ahead of the mercury a little metal index, sliding within the tube, to the farthest ascent of the column, and there the index remains, although the mercury may recede, marking the maximum temperature since the last observation. A magnet will draw the index back to the diminished mercury.

The minimum thermometer has alcohol for its fluid, and is always placed with its tube nearly horizontal, the bulb end a little lower. In the bore of the tube moves freely a black glass index. A slight elevation of the thermometer bulb will cause the glass index to flow to the surface of the fluid, where it will remain. On a decrease of temperature the alcohol recedes, taking with it the glass index; on an increase of temperature the alcohol alone ascends in the tube, leaving the end of the index farthest from the bulb, indicating the minimum temperature.

In another common form of registering thermometer, two pieces of metal or some other substances—iron and brass, as a rule—which expand unequally, are pinned together in the form of a horse-shoe or of a strap. Rising heat, affecting one more than the other, will cause the double plate to warp in that direction; while cooling will warp it the other way. To the plate is attached a delicate lever, armed with a pencil which inscribes these movements upon a paper dial, operated by clockwork in such a way as to leave a continuous record of the varying temperature.

Special forms of thermometer are made for testing hot liquids, like dyes, beer, varnishes, etc.; for ascertaining the temperature of the soil at different depths; the temperature of the sea from the surface to the abysses; and for various other particular purposes. In the self-registering deep-sea thermometers, which are sometimes sunk to the icy profundity of two

thousand fathoms, the enormous pressure had to be guarded against—not only that the glass itself should not be crushed in—but that it should have no effect upon the accuracy of notation. To provide against this danger the thermometer as a whole is inclosed in a strong copper case and the bulb is jacketed in an outer bulb filled with alcohol. Even then a pressure correction has to be applied, which has been the subject of much study.

For extremely high temperatures special instruments must be constructed, called pyrometers, or fire-measurers. These are used in making steel and in other smelting operations, in testing superheated steam in boilers, and so forth. The excessive temperatures which are attributed to incandescent metals, to flame, etc., are the result of calculation rather than observation, since the material of a thermometer will only stand a limited amount of heat, long enough to make a record; furthermore, "when a thermometer is heated above a certain point the mercury column is permanently displaced with regard to the scale,"—in other words, the accuracy of the instrument is destroyed. It has been found, however, by experiments at the Yale observatory, that by subjecting instruments intended for maximum readings to a temperature of 200° Fahrenheit for a hundred or more hours in succession, an alteration of scale amounting to eight or ten degrees will take place, and then cease, after which a thermometer so treated will give readings as accurate between the boiling point and 500° or 550° as are those of an ordinary thermometer between the boiling point and zero. Pyrometers are made to read up

to 1000° or even 1500° of heat by filling the tube above the mercury column with three or four atmospheres of compressed air; but as a matter of fact readings above 600° are pretty much guess-work.

Considering that so large an element of error—scientifically speaking—attaches to the most carefully made instruments, certain institutions of repute in Europe and on this continent have undertaken to maintain standards, and to compare and verify thermometers for scientific purposes. The standards themselves are exceptionally fine instruments which have for a long series of years been found to maintain almost unvarying uniformity in comparison with each other, and with the air thermometer, to which all are referred as the nearest natural standard; yet, according to Rowland, "the most accurate readings which one can make on an air thermometer will vary several hundredths of a degree." In place of dry air, hydrogen is now coming into use in Europe, with better results. This has long been a department of the great English observatory at Kew, which furnishes the highest authenticity in this direction. There is a thermometrical bureau at the Yale University observatory, where old and new instruments of all kinds are verified and any needful corrections indicated. To Mr. Orray T. Sherman, who for a time was in charge of this bureau, I owe much of the information compiled in this article.

The United States Signal Service, which is the largest single consumer of thermometers in America, makes its own tests at Washington, adopting the air thermometer as the standard.

DERZHÁVIN'S ODE TO GOD.

BY NATHAN HASKELL DOLE.

ONE of the stock pieces in almost every "Fifth Reader" is, or used to be, Sir John Bowring's majestic, though necessarily inadequate, translation of Derzhávin's Ode to Deity, or "God," as it is simply entitled in the original. A few stanzas of it admirable in themselves and in some lines curiously faithful, may well serve to introduce a short account of the ode and of its author and the first literal translation into English prose.

I.

O thou eternal One! whose presence bright
All space doth occupy, all motion guide;
Unchanged through time's all-devastating flight;
Thou only God! There is no God beside!
Being above all beings! Mighty One!
Whom none can comprehend and none explore;
Who fill'st existence with *Thyself* alone;
Embracing all,—supporting,—ruling o'er,—
Being whom we call God,—and know no more!

II.

In its sublime research, philosophy
 May measure out the ocean deep—may count
 The sands or the sun's rays—but God! for Thee
 There is no weight nor measure:—none can
 mount
 Up to Thy mysteries; Reason's brightest spark,
 Though kindled by Thy light, in vain would
 try
 To trace Thy counsels, infinite and dark:
 And thought is lost ere thought can soar so
 high,
 Even like past moments in eternity.

IX.

The chain of being is complete in me;
 In me is matter's last gradation lost,
 And the next step is spirit—Deity!
 I can command the lightning, and am dust!
 A monarch and a slave; a worm, a god!
 Whence came I here, and how? so marvel-
 ously
 Constructed and conceived! unknown! this
 clod
 Lives surely through some higher energy;
 For from itself alone it could not be!

Sir John says of the ode and the author as
 follows:

"Of all the poets of Russia, Derzhávin is,
 in my conception, entitled to the very first
 place. His compositions breathe a high and
 sublime spirit; they are full of inspiration.
 His versification is sonorous, and original,
 characteristic; his subjects generally such as
 allowed him to give full scope to his ardent
 imagination and lofty conceptions. Of modern
 poets he most resembles Klopstock. His *Oda*
Boga, Ode to God, with the exception of
 some of the wonderful passages of the Old
 Testament, 'written with a pen of fire' and
 glowing with the brightness of heaven,—pas-
 sages of which Derzhávin has frequently
 availed himself,—is one of the most impress-
 ive and sublime addresses I am acquainted
 with, on a subject so pre-eminently impress-
 ive and sublime."

In a note to the original edition of the trans-
 lation Sir John informs us that this poem had
 been translated into Japanese "by order of
 the Emperor and is hung up, embroidered
 with gold, in the Temple of Jeddo." He adds:
 "I learn from the periodicals that an honor
 something similiar has been done in China to
 the same poem. It has been translated into
 the Chinese and Tatar languages, written on
 a piece of silk and suspended in the imperial
 palace at Pekin."

Probably no modern poem has ever been so
 widely known. It has been published in
 German, English, Polish, Bohemian, Italian,
 Spanish, and Latin. There were a number

of years ago at least fifteen versions in
 French besides the French prose version made
 by the Russian poet Zhukóvsky while a pupil
 at Moscow University. The translation
 which follows is as scrupulously literal as pos-
 sible, with nothing added or taken away. It
 shows Bowring's variation from the original,
 which he confesses to have made because it
 did "not accord with his views of the perfec-
 tions of the Deity." Nothing, however, can
 quite show the splendid swing and movement
 of the Russian verse with its mingled strength
 and sweetness of vocalization. The first stan-
 za transcribed may give some idea of it.

*O Tui, prastranstvom bezkonétnui,
 Zhivui v dvizhenii veshchestvá
 Tehenym vremeni prevéchnui
 Bez lits, v triokh litsakh Bozhestvá
 Dukh vsiudu sushchii i yédnui
 Komunyet myesta i prichínui
 Kozo nikto postitch nye mog,
 Kto vsyo soboyu napolnyáet
 Obyomlet, zizhdet, sokhranyáet,
 Kovo mui nazuivaem—Bog!*

I.

O Thou, infinite in space,—Living in the
 motions of matter—Eternal in the course of
 time,—Without persons in the three persons
 of the Godhead!—Spirit everywhere perme-
 ating and One,—Who hath no place or con-
 dition—Unto whom no one can attain—Who
 fills all things with Himself—Embraces,
 vivifies, preserves—Whom we call—God!

II.

To measure the ocean deep—To count the
 sands, the planet's rays—Might be in the power
 of lofty intellect—For Thee there is no num-
 ber and no measure;—Powerless are the en-
 lightened spirits—Thou' born of Thy light—
 To explore Thy decrees—So soon as thought
 dare mount toward Thee—It vanishes in Thy
 majesty—As a passing instant in eternity.

III.

Existence, forth from chaos, before time
 was,—Thou from the gulfs of Eternity didst
 call forth—And Eternity, before the birth of
 the ages—Thou didst found in Thyself: By
 Thyself, self constituted—Of Thyself, self-
 shining—Thou art light, from whence light
 streamed.—Creating all things by thy single
 word—In Thy new creation stretching out—
 Thou wast, Thou art, Thou shalt ever be.

IV.

Thou containest in Thyself the chain of be-
 ings—Thou sustainest them and givest them

life—Thou joinest together the end and the beginning—Thou grantest life unto death.—As sparks are showered forth and rush away—So suns are born from Thee.—As on a bright, frosty winter's day—The spangles of hoar frost sparkle—So whirl, flash, shine—The stars in the gulfs beneath Thee.

V.

Millions of kindled luminaries—Flow through infinity;—Thy laws they operate—Pour forth revivifying rays.—But these fiery lamps—Whether piles of ruddy crystals—Or a boiling throng of golden billows—Others glowing—Or all alike worlds of light—In Thy presence are as night before day.

VI.

Like a drop drowned in the sea—Is all the shining firmament before Thee—But what is the Universe that I see?—And what am I before Thee?—In yon aerial ocean exist—Millions of worlds—Hundreds of millions of other worlds and yet—When I venture to compare them with Thee—They are but a single dot—And I in Thy presence am naught!

VII.

Naught! But in me Thou shinest—In the majesty of Thy goodness—In me Thou reflectest Thyself—As the sun in a tiny drop of water.—Naught! But life I feel,—Unsatisfied with aught, I soar—Ever aloft unto the heights;—My soul yearns to be Thine.—Penetrates, meditates, thinks:—I am, therefore Thou art also.

VIII.

Thou art! The order of Nature proclaims it—My heart tells me the same—My reason persuades me:—Thou art; and I therefore am not nothing!—I am a part of the universal All,—Established, methinks, in the reverend—Midst of thy Universe—Where Thou hast ended Thy corporal creatures—Where Thou hast begun the heavenly spirits—And the chain of all beings is linked to me.

IX.

I am a bond between all worlds everywhere existent,—I am the utmost limit of being—I am the center of living things—The initial stroke of Divinity;—In my body I perish in dust corruptible—In my spirit I command the storms;—I am a tsar, I am a slave; I am a worm, I am God!—But marvelous as indeed I am—Whence did I have my being? unknown!—But by myself I could not have been.

X.

Thy work am I, Creator!—I am the creation of thy wisdom,—O source of life, Dis-

penser of all good,—Soul of my soul and Tsar!—It was necessary for Thy righteousness—That the gulf of mortality should be spanned—By my immortal existence—That my spirit should be wrapped in mortality—And that through death I should return—Father, to Thy immortality!

XI.

Incomprehensible, ineffable—I know that my soul's—Imagination is helpless—To paint even Thy shadow;—But if it is necessary to sing Thy praise—Then is it impossible for feeble mortals—To reverence Thee in any other way—Than by yearning toward Thee—By losing one's self in Thy measureless variety—And by shedding tears of gratitude.

It is of course hopeless for prose to express the marvelous, dignified rhythm of the original nor can the English language reproduce the delicate shades of meaning which the Russian words so richly hold. If ever inspiration touched with her sacred torch the mind of man it was when Derzhávin returning from morning mass on Easter Day, 1780, began this magnificent ode. Nevertheless he did not finish it or give it to the world until some four years later, when it appeared like a perfect carving, without flaw or blemish.

Gávriil Románovitch Derzhávin was born at Kazán on July 3 (14), 1743. His parents were of the nobility but poor. His father was an army officer connected with the Orenburg regiment. His early life was nomadic; his parents taking him about from city to city in Eastern Russia. It is said that he was able to read at the age of four. At the age of ten he had a smattering of German which was taught to him without the aid of rules. He received also a sort of desultory training in mathematics. In 1758 the Kazán Gymnasium was opened and he was enabled to study Latin, French, arithmetic, geometry, dancing, music, sketching, and fencing. In 1762 he became a private in the famous Preobrazhónsky regiment, and when Catherine the Great mounted the throne he was obliged to stand on guard at the Winter Palace.

Derzhávin passed through all grades in the army service—corporal, master at arms, sergeant, and finally after ten years became ensign. He paints in the gloomiest colors in his autobiographical sketches, the army life of that period and tells how he nearly ruined himself in the dissipations of his fellows. Card playing, drunkenness, and every vicesur-

rounded him, but on the whole his essentially healthy nature kept him from great harm, and he really possessed a high sense of his moral dignity. He took part in the expedition against Pugachóf (the false Peter III.), and after an exciting campaign among the Kirgiz-kaizákí was promoted as Kapitán-porúchik, or bombardier, corresponding to lieutenant, and for his services on a secret commission was granted a small estate with some three hundred peasants in White Russia.

The morality of that day saw nothing scandalous in his doubling or trebling the money that he had already saved, by a course of fortunate gambling. After his return to Petersburg with the title of colonel, he married in 1778, Yekatyerína Yákovlevna Bastodorévna. It proved to be a happy marriage. His political prospects might have been improved, however, had he consented to marry a relative of Prince Viázemsky, the procuror-general, into whose department he had been transferred from the army, but love triumphed and hence he won the ill-will of the powerful prince. In 1779 he wrote his famous ode, "To Felítsa," which was afterward published, and found great favor with the strong-minded Catherine, who presented him with a gold tobacco-box and five hundred ducats. In 1784 he left the service with the title of "Actual Civil Councilor," and this same year his Ode to God was published in the Countess Dashkóva's periodical, *The Companion*.

The poet was not allowed to enjoy his independence long. Catherine sent him off as governor of Olónets. Here he came into conflict with Tutólmín, a relative of the Prince Viázemsky, whom he had offended. It resulted in Derzhávin being sent to establish a new city—Kiem—on the desolate shores of the White Sea. Here he wrote a "Project for the Support of the Lapps," which brought down upon him Tutólmín's unmerciful ridicule. As Governor of Tambóv, he wrote a number of reports, including a topographical description of that government. His ardent nature kept him in hot water most of the time. During this period he enriched Russian literature with many stately odes. In 1790 he was back in Petersburg, where he published the ode on the capture of Izmáilo. In return for this, as it celebrated her favorite Prince Potémkin, Catherine gave him a diamond-adorned snuff-box. Soon after he was made secretary of

state. He was allowed to write freely, but Catherine herself insisted on being his critic and censor. His literary activity at this time was enormous. In 1793 he was made senator, privy councilor, and a cavalier of the order of St. Vladímir, as well as president of the College of Commerce. His wife died in April, 1794, and between then and the death of Catherine, two years later, he wrote "The Storm," "On the Death of Y. Y. Derzhávin," "My Idol," "The Grandee," "The Nightingales," etc. We have purposely said nothing of Derzhávin's rather unworthy hesitation between paying fealty to Potémkin and Count Zúbof, Catherine's favorites. It was said that "he was flattered by both and knew not which side to choose."

Derzhávin's remarkable career as a public man did not cease at Catherine's death. Paul at first made him director of the imperial council, but soon afterward reduced him to the rank of senator. Suvórof's successes in Italy in 1799 inspired a number of spirited poems which pleased the martinet Emperor and he was sent on several important commissions and granted the rank of actual privy councilor and made a member of the order of John of Jerusalem. He was also appointed again president of the College of Commerce and made imperial treasurer.

On the accession of Alexander Pávlovitch, Derzhávin was made a cavalier of the order of St. Alexander Névsky. In 1802 he was minister of justice, but a year later he was retired at his own request. After this, though he wrote much, he wrote not so well. Only two of the pieces of this period—Zhísn Zvánskaya, or life at his country estate of Zvanko near Novgorod, being a metrical letter to the Metropolitan of Kíef, and another epistle to Plátosfatáman of the Don Cossacks being worthy of mention. Between 1812-14 he wrote a sort of epico-lyric hymn on the driving out of the French from Russia and other odes on the stirring events of that time.

Derzhávin died at Zvanko on July 9(21), 1816, having attained almost every honor that it was possible for a Russian man of the people to receive. He stood head and shoulders above any of his contemporaries as a poet. As a man he was good, just, faithful in friendship, frank, but rash, and apt to say things that brought him into trouble.

His poems were published in 1776, 1798, 1804, 1808, 1831, 1833, and in 1864-1872, in an edition complete in seven volumes.

EDITOR'S OUTLOOK.

ARE "WEATHER PREDICTIONS" A SCIENCE?

MANY years ago when "The Farmer's Almanac" hung in every chimney-corner, a traveler stopped at a farm-house and asked the farmer if the morrow would be a fine day. The farmer at once took down the almanac and read the "predictions"—"about this time look out for thunder storms." As these words extended over ten days of July, very likely they might come true in the course of the ten days. The traveler laughed at the prediction; then the farmer became vexed and said, "They calculate the *eclipse*, why shouldn't they calculate the weather?"

To-day we read the weather "indications" in the morning papers and govern our umbrella accordingly. Yet with all the immense advance from the blind guessing of the "Farmer's Almanac" to the signal service indications, there is a lingering disbelief in the whole business. There is a very general doubt as to whether the "indications" given out by the Government are founded on any real scientific basis. The severe storm that did so much damage on the coast of New Jersey early in September was not announced in advance, as so many other storms have been announced. It is admitted that about seventeen per cent of all the indications fail, and this comparatively large percentage of failure is the direct cause of this want of faith in the "indications."

How far is this want of faith justified? How nearly are any weather predictions a science?

In the first place, the science of the weather is very new. We had practically no means of studying the movements of storms until the telegraph was invented and it was twenty years after that before the idea of using the telegraph as a scientific tool occurred to men of science. Secondly, only a government could use such a costly tool. The principle on which the weather "indications" are made up is well-known. Reports are made every few hours from the signal stations to the office at Washington. From a study of these reports the probable changes of the weather are estimated and telegraphed to all points of the

country. Theoretically, every one of these predictions, or as they are more properly called "indications," should be correct. About 83 per cent are correct on their face. Really about 90 per cent are correct, because the districts for which indications are now made are comparatively small. At first, the indications were announced for large tracts, like New England or the Middle States. They are now given for single states and parts of states, which tends to increase the real value of the percentage of successful reports. When a storm was announced for New England, and it passed to the north, over Vermont, New Hampshire, and Maine, people in Connecticut and Rhode Island were sure the indications failed, and said, "I told you so. The indications always fail"; and the good people in Massachusetts, said, "It was cloudy, but did not rain, and the signal service people did not know their business."

It must also be noticed that in all this time the actual instruments used in making the observations at the stations have not been materially changed. Thermometers and barometers are no better to-day than twenty years ago. The number of stations has not been very greatly increased and the men employed as observers are not very much better equipped for their work than at the very start. There has been a gain, because the percentage of successful indications has increased, and this gain has come, first, from the immense number of facts that have been added to the science, and, second, from experience in handling the facts. It may be doubted if the indications can ever be made exact. The laws governing the movements of cyclones (storms) and anti-cyclones (fair weather) are not yet completely understood. We may observe a storm off the Pacific Coast. It advances upon the coast and meets the Rocky Mountains. It may bank up against the mountains until it forces a way for itself to the south or north, or it may split up and a portion escape to the north and a part to the south until it can find its way into the Mississippi Valley. Which way it will go, is not yet decided nor is it yet clear by what laws its movements are governed. The general law is

that storms shall move with the earth from west to east. A storm may develop in the West Indies and move north into the Gulf and then drift across Florida and be lost at sea. And then it may with apparent caprice (not really, for caprice is only a human attribute, it does not exist in nature) it may turn westerly and strike our Atlantic Coast. It may then strike the Appalachian system of mountains and bank up over the eastern Middle States, and finally escape to sea without touching New England. Another storm may travel easterly and meet the Appalachian system and be dammed up behind it for hours only to escape to the north and go off down the valley of the St. Lawrence. These storm movements are eccentric and we do not yet understand the laws that govern them. They are exceptions to the general law of storm movements. Therefore, it is safe to say that there is a science of weather predictions within certain limits. It cannot be regarded as an exact science, like mathematics or music, yet it is a real science, quite as much so as geology.

Only a government can undertake weather observations and reports. The singular beings who occasionally appear as "weather prophets" may safely be set down as enterprising persons in search of a certain kind of fame. Their "predictions" come true on the "law of chances," precisely as did the "predictions" in the old "Farmer's Almanac." They come true, if you remember the successes and take pains to forget the failures. Some of these prophets predict dire storms, earthquakes, and tidal waves many months in advance. They sit in their libraries without a single observation outside their own towns and calmly tell us what is to be. They have their use, no doubt, in the social economy of the world. It is probably to be "a source of innocent merriment."

DAILY REFINEMENTS.

AMONG the young people who come within the range of the *Outlook* is a bright young fellow who complains that his greatest social trouble is in not "feeling natural" when he is practicing certain refinements. He explains that he knows what is to be done and how to do it, but his knowledge has been obtained from books and that he has had so little opportunity for using it in society, that he has not gained ease. When he uses his finger-bowl,

though he knows what to do, his arm comes up slowly, and conscious of itself, the water feels cold and he has to exert his will to get his finger-tips out of it and wiped. When he enters a reception room, he sees himself, and not the hostess. After he gets home he furiously gets out his guide to good manners and consoles himself by reading its assurances that so and so is the proper thing to do. He claims that he is not bashful, but that the consciousness of his lack of practice pursues him and his tender conscience reproaches him because he is trying to palm off as his own, manners learned in a manual of etiquette. He asks, "What shall be done?"

Perhaps there might be counselors who would tell him, "Go ahead. If you know, put on a bold face, and do. You cannot go far wrong. Your assumption of ease will carry you through." The advice would carry the young man through—but not up in society. Manners by rule are sure, sooner or later, to betray their owner. The newspapers a few weeks ago contained dispatches of the arrest in New York of a clever Austrian embezzler. He had arrived in America with \$150,000 but betrayed himself by a habit of laying the forefinger of his right hand on his nose in a knowing way. Probably he knew the danger of the trick, but in an unguarded moment up went the fingers, and on went the hand-cuffs. The attempt to bluff society usually results similarly. There is but one legitimate and sure road to a natural and graceful use of social amenities—and that is practice. By that we do not mean practice in what is called "society." There is a common opinion that this is the only place in which to rub off barbarisms,—a great mistake. Perfect naturalness of manner exists only in those habits which one employs day by day. A person who is habitually surly is much more natural when growling than when smiling. While he who eats pie from a knife may do it with ease, his attempts to use a fork make him the most awkward of spectacles. The person who does not permit himself slovenly positions in the family sitting room or in his private chamber will carry himself erect in the drawing room, will not stumble over furniture, or sit awkwardly. If he has drilled his hands and feet at home, they will not trouble him abroad. If a young fellow makes it a rule to open the door for his mother or sister when she leaves the room, to restore a dropped article, to lift his hat when he meets

her, he will do so instinctively, and without embarrassment, when thrown into social life. If he never allows himself to boast at home, to strive to out-tell somebody else, to guarantee information, or to display curiosity, at a dinner party he will not be guilty of such breaches of good breeding. If punctual at home, he will not break the saw which runs, "To be too late is a crime, to be too early, a blunder." Hands kept off the table linen and which never finger the silver and china in private, will not do so in public. If at his daily meals he sips his soup from the side of his spoon, breaks, not cuts, his bread, he will do so when he dines with the great and fashionable.

True, it may be discouraging to practice these habits among those who have no interest in social fineness. But no one will consider it impossible so to do, nor is it necessary in putting one's self into training, to become so conspicuous as either to incur ridicule or antagonism. The very effort to perfect one's habits without attracting attention will be no mean drill. It is not, of course, right that any young person in his own home should be obliged to be his own mentor in matters of etiquette. The father and mother wrong a child who leave him uninstructed in these matters when they might by holding themselves to well-bred habits give him the advantages which these manners bring. They cannot give him, perhaps, an *entrée* into polite society, but they can make a polite society in their homes; and the practice which he will get there, will give him a polish marked by a subtle refinement which a whole life in conventional society would be unable to impart.

WHAT IS THE HIGHER CRITICISM?

THE discussions going on over the so-called "Higher Criticism" are rather puzzling to the general reader. What is meant by the thing in controversy? By *criticism* in the scholar's sense of the term we mean inquiry, investigation, research. By higher criticism, we mean *literary* investigation or research. But what is literary investigation? Its aim is to discover by examining the words and style of a book, and by comparison of the words and style, to ascertain who wrote a given book and the date of his work and his motive in writing it and other matters of interest in interpreting the book. Applied to the Bible,

the Higher Criticism (or literary criticism) proceeds just as it would in examining any profane author of antiquity.

The line between higher and lower is arbitrary, or rather historical, for all criticism is literary; but some critical inquiries have always been allowed in the study of the Scriptures. The line is drawn just now between assuming that Moses wrote the Pentateuch and assuming that this may be inquired into and searched out by the literary method. Suppose, for example, that research should show patchwork in words employed in naming the Deity, one term being of later origin than Moses. This fact would have to be explained unless it could be disproved. One argument against this kind of inquiry runs as follows: the Bible says it is the Word of God and that certain persons wrote the books as they were moved by the Holy Ghost. Inquiry assumes that the Bible is not true; sets out to prove that it is not true. We are aware that the words we quote would not be accepted by all those who oppose Higher Criticism. For they themselves spend much time in prying into these very matters—that is they also search out and explain what the skeptical critic thinks that he finds by literary methods.

The real controversy is, however, about the conclusions reached and not about the method employed. What strikes the public ear is that some Christian scholars are called rationalists by other Christian scholars. This charge is not made because one party uses literary methods and the other does not; but because the accused critics seem disposed to accept some of the theories of rationalists. For the moment the facts in dispute are not Biblical facts but much more modern facts. The issue raised is whether Dr. Harper and others believe in Moses as an author. They declare that they do so believe; and it is replied that what they have written is fatal to the Mosaic authorship of the first five books of the Bible. In short it has become a personal controversy and it ought to be put an end to, in that form of it, as soon as possible. If the higher critics are wrong, let it be clearly shown. The day is gone for settling questions by calling names. A rationalist who denies all inspiration is a very different person in faith and works from the Christian scholars who are quite sure Moses did not write the account of his own death, and are willing to inquire diligently into all matters pertaining to the authorship of the books of Moses.

It is plain enough that the truth cannot be harmed by any new knowledge. Those who believe that the Bible is the truth of God have no fear of literary criticism. Let us have all there is. Let the rationalists point out difficulties and insist upon them until they are thoroughly answered. There is no kind of human light from which the Bible can suffer the smallest damage. And the effect of refusing to use any human lamp is more fatal to faith than skeptical opinions. We must give literary criticism a free hand. Honest believers would be made skeptical by a refusal to turn on the full blaze of any form of knowledge. But, on the other hand, it is probable that all present theories of patchwork in Moses are unsound. The critics of rationalistic temper have thus far been pretty well answered. Nor is the tool of the critic a perfect one. Literary criticism requires a better kind of mind, a better judgment, than is made in schools of grammar. It may be generations yet before we have critics capable of examining Moses. Thus far, we have theories rather than knowledge and the alleged facts are themselves under fire. Moses is doing very well, thank you; it is the sweating critics who are having an unhappy time of it—with Moses and with each other.

THE NEW STATES.

The thirty-seven older sisters in the family of the United States have had for the past few months opportunity to watch a novel spectacle, a quadruple addition to their number putting on the habiliments of statehood. While there has been enough of the eagerness and awkwardness of the boy with his first small-clothes to give a touch of the comic to their constitution-making and first elections, there has been so much earnestness, good sense, and determination that the verdict is general, the family is honored by the increase. Now that they are fully in, three of them as Republican—the Dakotas and Washington, and one as Democratic—Montana, we may review their condition.

The four new states are a remarkable quartette. In size the two Dakotas are more than three times as large as New York State, and Montana is almost as extensive. Washington contains a tract nearly nine times as large as Massachusetts, and the area of the four is more than one-sixth as great as the former thirty-seven states.

The wealth of the Dakotas was assessed last year at over \$200,000,000. They are raising this year some 70,000,000 bushels of wheat, 35,000,000 bushels of corn, 10,000,000 bushels of barley, 50,000,000 bushels of oats. There is coal enough in these states for the whole country when the railroads projected are carried to it, and so easy to mine that every family in the neighborhood has its own simple shaft. North Dakota points to the largest cultivated farm in the world—20,000 acres.

Montana's property last year was assessed at some \$70,000,000. She supplies London with beef, produces unlimited pounds of mutton and wool, and the output of her imperfectly developed mines was over \$30,000,000 last year. Washington assessed property in 1888 to the amount of about \$85,000,000. She points to trees 10 feet in diameter and 200 feet high, and tells us she has a tract of such timber as large as the state of Iowa, and coal enough to supply the Northwest. The population which handles this wealth and has undertaken to open these vast tracts to the world is small. The Dakotas have only about 700,000 inhabitants, including Indians; Montana has 140,000; and Washington less than 200,000, but these people have great faith in the country, and they are of good American stuff, as a rule, and have profited by their experience in pioneering. They are learning the hollowness of booms, and the solidity of legitimate business. Though the cent is still never seen West of the Rockies, and the "nickel" is scoffed at, they are beginning to understand the wisdom of economy. The Dakotas rarely now trust to a single crop, Montana knows the folly at last of leaving her herds at the mercy of blizzards, and Washington is making efforts to guard against the destruction of forests. The value of good stock is realized and the best breeds of cattle and horses are introduced. The towns they build go up quickly and shodily, perhaps, but even fire cannot keep them down longer than for a night. They are new—a recent correspondent speaks of the pleasurable emotions he experienced when after visiting hundreds of these towns he found one, at last, old enough to support a graveyard—but there is nothing too costly or difficult for them to attempt, electric lights, water works, and other modern conveniences come almost as soon as the ground-breakers.

The opportunity in territory held out to settlers is great. The Dakotas had 22,000,000 acres for settlers last year, and this has been increased 11,000,000 acres recently by the consent of the Sioux to the opening of their reservation.

It is not mere land and natural resources which the new states bring into the Union; on the whole they are law-abiding communities. Montana long ago asserted her determination to be orderly by the summary methods of her famous vigilance committee. The Dakotas last year had less than 150 prisoners in her two penitentiaries. Schools are established as soon as a county is surveyed,

for the men and women who compose these towns regard the school as the one great necessity. There is an unusual percentage of culture. Montana and Washington each have enough college men from Harvard alone to support associations. In the constitution making of the last summer the emphasis placed on prohibition, on woman's suffrage, on ballot reform, education, reform for criminals, and other questions showed the tendency of thought in the states. This was not so because politicians desired it, but because popular sentiment made it necessary. In short, vast resources, fresh, spirited determination and healthy morals mark the new states.

EDITOR'S NOTE-BOOK.

THE resignation of Corporal Tanner as Commissioner of Pensions is a disappointment to the veterans of the Union army who had high hopes that he would represent them in President Harrison's administration with the sympathy of a private soldier. We fear that the Corporal's sympathy became the rock against which his official life struck. From the story of this sudden entrance to, and departure from, official life the people have learned the magnitude of the Pension Bureau, and the place it fills in the Government. These are useful lessons.

WE are in the midst of a contest between New York and Chicago as to which shall entertain the world's fair. It seems that Congress will decide between the rival cities. New York has the sea coast and the greatest population to plead. Chicago is rich in land, and is at the center of active America. It will be the battle of the giants. Trade, commerce, corporations, politics, every potential influence, will be set in motion to aid in making the decision.

THE call for a conference of the states of the three Americas was issued by the United States because it wanted peace with its neighbors and more of the great trade which they are carrying on with Europe. The reasons why we have so little commercial intercourse with our southern neighbors are numerous. There are twenty-one lines of steamships between Europe and South America, and not one direct line to the

United States. If a man attempts to carry a package of starch or anything else from New York to Patagonia he is compelled at every boundary to study a new set of irritating and complex custom regulations, a new system of weights or measures, and a new kind of money. When he gets it there he may find a poor imitation from Europe bearing his trade-mark and offered at a price ruinous to him. Trade under such circumstances is not apt to grow. The conference which has begun its session in this country by a month's tour of the delegates will have a large educating influence for both hosts and visitors; that it will materially influence trade at once can scarcely be expected; that it will promote peace and fraternity there is no doubt.

THERE is rejoicing with good reason over the successful trial trip of the United States cruiser *Baltimore*. She averaged a speed of 22.2 knots for four hours, 3.2 above what she was planned to reach. She is as nimble as fast, and her armament is complete for all kinds of warfare. Another cruiser of the same series was launched in September, the *Philadelphia*, her cost, size, displacement, and speed were to be about the same as the *Baltimore*. These new war ships are putting the United States navy into a condition of respectability, though it is a question whether any one of these will be equal to the latest and best addition to the Italian navy.

A CODE of inter-party courtesies has never been advocated, to our knowledge, in the

United States. How pleasant such intercourse would be, the recent unexpected congratulations between the present Secretary of War and his predecessor well illustrate, after the trial trip of the *Baltimore*. General Tracy, Secretary of the Navy under a Republican administration, sent the following telegram to his predecessor in office:

Accept my heartfelt congratulations upon the magnificent performance of the cruiser *Baltimore*.
B. F. TRACY.

Mr. Whitney replied:

Many thanks for your kind dispatch. I felt certain the result would be satisfactory, as I do also that you will continue to raise the standard and in time register much higher results than these.
W. C. WHITNEY.

THERE can be no doubt that the Chickasaw nation is becoming "civilized." The present governor and legislature are of opposing parties. In one county five delegates, four of them white, were elected. Now only white men who have Chickasaw wives can vote or hold office, and the opposition challenged the election on the ground that illegal white votes were cast. To this the other party rejoined that intimidation had been practiced on the whites in other counties. The situation is made more interesting by a bill in the legislature proposing to disfranchise all white citizens. The Chickasaws must have been reading the reports of Eastern politics.

THE French Government's manner of disposing of a monopoly is concise and to the point. In September it took possession of the telephone system. It seems that in granting a charter to the company the Government had reserved the privilege of buying it out when it thought best and conducting the business itself. It concluded some time ago that the company was reaping too large profits and tried to obtain possession by mutual agreement. This was refused and force followed. No interruption of business attended the compulsory change of managers, and rates have been lowered in Paris about 50 per cent.

A PATHETIC item was cabled from Italy in September. A man was arrested who had thrown a stone at the Italian prime-minister, Signor Crispi. When asked why he did it, he replied that Signor Crispi looked happy while he had had nothing to eat for two days. The man who in trouble or mental worry has

felt the irritation and the discord of all mirth, is able to understand the impulse of the hungry who revolt against all signs of comfort. The greatest safeguard those in authority can have, is that those below them are well fed and housed.

WHAT do workingmen want? is a frequent question of those who have made no particular study of the labor question. The International Congress of Workingmen held in Paris has put forth a platform which answers the question according to the opinion of the better class. Its leading points are: An eight-hour law; one holiday in a week; no night work except under necessity; no labor for children under fourteen years of age; education; pay for over-time; responsibility of employers for accidents; inspectors chosen by the workers; prison labor under same conditions as free and on public works if possible; no cheap foreign labor; equal pay for men and women for equal work. All of which have a strong savor of good sense.

THE Nationalists and Christian Socialists are two new and growing societies advocating that the Government take control of all the industries of the country. The first believes that the natural development of the principle of combination will bring about the result. The second claims that the moral side of man's nature must be changed and the principle of human brotherhood be recognized before nationalization of industries can be made possible. The latter seems to us to be working on surer grounds. The human nature of "Looking Backward" (the book to which both societies owe their marvelous growths and whose dream they aim to realize) is not the human nature of unsanctified men.

SOLOMON once described wisdom under the figure of a woman, "length of days in her right hand and in her left hand riches and honor." Mr. De Costa, the artist who designed the new cover of THE CHAUTAUQUAN, seems to have been influenced by Solomon's conception in producing the figure which should represent the work of the Chautauqua Literary and Scientific Circle and of THE CHAUTAUQUAN. His "illuminating lady," as Bishop Hurst calls her, certainly has force, grace, and suggestiveness; and as she stands poised on the globe, light and learning for the whole world in her hands, she symbolizes faithfully the work which THE CHAUTAU-

QUAN aims to do. The new cover is a success, so says everybody. It combines, we believe, two features essential in a cover: beauty to attract attention, and the convenience of a table of contents.

"How often do you put in new ropes?" asked an adventurous tourist who had been drawn up a steep cliff in a basket attached to a rope. "When the old one breaks," was the consoling reply. It was such a provision against danger that the Antwerp city council made. Dynamite factories and petroleum store-houses stood side by side. Remonstrances were frequent, but nothing was done. At last the "rope broke" and thirty-five persons were killed, and some three hundred injured. The land-slide at Quebec was another terrible example of neglecting threatening danger. Ten years ago the possibility of the rock falling in that portion was pointed out.

THERE is now and then a man to be found who is skeptical of the practical benefits of tedious and costly laboratory experiments. To such a one the discovery reported from the University of California will appeal. The claim is that combinations for tanning have been found which will render leather impervious to water and so pliable as to be almost indestructible. The economic value to the owner of a pair of shoes which will not wear out, and the disadvantage of such shoes to the shoe-maker, are apparent.

THE career of the Hon. S. S. Cox, ended by his death on September 10, was one of remarkable variety. A lawyer by profession, he left the bar to become an editor. Thence he drifted into politics. For eight years he was a congressman from Ohio, and from 1868 until his death, he was almost continuously in Congress as a representative from New York. He was known too as something of a diplomat. Mr. Cox had the writer's fever, and whatever he experienced he felt impelled to write out. His first terms in Congress resulted in a book. His first tour in Europe in "The Buckeye Abroad." His "Three Decades of Federal Legislation" was a direct result of his Washington life. "Why We Laugh" came from his reading of congressional reports—a very different effect from that which most of us experience. His term in Turkey gave him material for two books. Without any particular literary merit, his books were nevertheless readable.

A NEW development of the Chautauqua character in Scotland is known as the "Edinburgh University-Extension." The new consul to Edinburgh, Chautauqua's good friend Wallace Bruce, writes us of the inauguration movement: "It was nobly opened by a *conversazione* on September 24, at the museum of Science and Art; about one thousand five hundred persons were present. Sir Thomas Clark, Baronet, presided. The courses of lectures comprise history and ethics, political and economic science, biological science, literature, art, music, and oratory. Dr. Drummond presided at one meeting and I spoke at another on the evolution of the Chautauqua Movement in America."

"A CROWD of generous philanthropists going about like roaring lions, seeking what they can endow," is the way Prof. Mahaffy described American generosity. He wondered then why it was that this crowd had overlooked so the American College of Archaeology in Athens. He and the rest of the world will wonder still more if it fails to appropriate the \$80,000 necessary to purchase the site of Delphi for excavation. It is a rare opportunity which Greece has given American scholarship, and it will be a shame if American wealth does not see that it is improved.

THE 15th of September was remembered as the one hundredth anniversary of James Fenimore Cooper's birth. Everybody that ever felt the thrill and the freshness of "The Spy," "The Pathfinder," "The Deerslayer," "The Pilot," or "The Wreck of the Grosvenor," was glad to remember the man who wrote them. Cooper wrote a distinctively American novel, giving to literature a kind of color until then unknown to it. He found romance where others denied that it could be, and he made himself a large place in what can be called purely American literature.

A SMOKELESS battle field! The idea is a shock to all our preconceived notions—yet such is to be the battle field of the future. The French and the Germans both have obtained possession of methods of making powder which will not produce even a film in exploding. This new invention adds a horror to war almost equal to the new inventions of murderous fire-arms, for it takes away the protection of the overhanging smoke in a battle, and the warning cloud which an isolated discharge left behind it.

C. I. S. C. OUTLINE AND PROGRAMS.

FOR NOVEMBER.

First Week (ending November 8).

- "History of Rome." Pages 60-82.
 "Political Economy." Part II. Chapters I. and II.
 "How to Judge of a Picture." Chapters VII. and VIII.

IN THE CHAUTAUQUAN:

- "The Burial of Rome."
 "The Cause of Geographic Conditions."
 Sunday Reading for November 3.

Second Week (ending November 15).

- "History of Rome." Pages 83-92.
 "Political Economy." Part II. Chapters III. and IV.

IN THE CHAUTAUQUAN:

- "The Politics which Made and Unmade Rome."
 "The Uses of Mathematics."
 Sunday Reading for November 10.

Third Week (ending November 22).

- "History of Rome." Pages 92-104.
 "Political Economy." Part III. Chapters I. and II.

IN THE CHAUTAUQUAN:

- "The Life of the Romans."
 "Traits of Human Nature."
 Sunday Reading for November 17.

Fourth Week (ending November 30).

- "History of Rome." Pages 104-112.
 "Political Economy." Part III. Chapters III. and IV.

IN THE CHAUTAUQUAN:

- "The Story of Sejanus."
 "Mental Philosophy."
 "What Shall the State Do for Me?"

Sunday Reading for November 24.

BRYANT DAY.—NOVEMBER 3.

"And from his ashes may be made
 The violet of his native land." —Tennyson.

A BRYANT ROUND TABLE.

(Let a different person be appointed to give each one of the groups of readings, and one to open each topic for discussion.)

Bryant's flowers: "The Yellow Violet"; "The Death of the Flowers"; "Innocent Child and Snow-White Flower"; "The Fringed Gentian."

Bryant's pictures of autumn: "November";

"Autumn Woods"; "The Voice of Autumn"; "The Third of November, 1881"; "My Autumn Walk."

Bryant's birds: "To a Waterfowl"; "The Lost Bird"; "The Return of the Birds"; "Robert of Lincoln."

Bryant's table books: "Version of a Fragment from Simonides"; "The Death of Schiller"; "Dante"; "In Memory of William Leggett."

Bryant's songs: "Hymn of the Waldenses"; "The Song of the Stars"; "A Song of Pitcairn's Island"; "The Hunter's Serenade"; "Song of Marion's Men"; "I Broke the Spell that held me long."

Topics for conversation: Bryant's newspaper, *The Evening Post*. Bryant's politics. Bryant's travels. Bryant's homes.

SECOND WEEK.

1. Roll-Call—Quotations about government.
2. Table Talk—Current events.
3. The Lesson.
- Music.
4. Paper—The Gauls.
5. Answers to questions on anatomy and nature on page 82 of "How to Judge of a Picture."
6. *Questions and Answers* on "Political Economy," in THE CHAUTAUQUAN.

ROMULUS DAY—NOVEMBER 18.

"We'll try the gods again."—Beaumont and Fletcher.

AN EVENING OF STORY-TELLING.

Faustulus, Remus, Romulus, Tatius, Tarpeia, Hersilia (one of the Sabine women), and Proculus should be impersonated, and each one tell his own story in as romantic a manner as possible. Let Romulus in his autobiography tell of the death of Remus, Tatius, of the death of Tarpeia, and Proculus, of the disappearance of Romulus. The stories may be written or simply told, but all the incidents connected with each should be spun out into narrative form. There should be no attempt made to represent the characters further than the use of the pronoun I; the incongruity between the teller and the story will only heighten the effect.

THIRD WEEK.

1. Roll-Call—Quotations on warriors.
2. Table Talk—The new states.
3. The Lesson.
- Music.
4. Summary of the Punic Wars.
 Trace all routes on the map, locate battle

fields, give dates and leaders, and results.

5. Paper—Michael Angelo and his paintings.
6. Debate—Resolved: That by granting private ownership in land the state permits a monopoly of one of the bounties of nature. (See text-book on "Political Economy," pp. 77-78, 161, and 296-297.)

FOURTH WEEK.

1. Roll-Call—Quotations on money.
2. Table-talk—The Exposition of 1892.
3. The Lesson. Music.
4. Paper—Compare Hannibal as a general with both the Scipios.
5. A practical application of rules given in "How to Judge of a Picture." Let some picture be placed before the circle and tested point by point as laid down in the book.
6. Debate—Question: Is the coinage of silver as authorized by the "Bland Bill" a source of financial danger to the United States?

THE CHAUTAUQUAN TRAVELERS' CLUB. ITINERARY NUMBER TWO.—FROM ROME TO THE SEAL FISHERIES IN BEHRING SEA.

Rome, by rail, to Naples (museum containing antiquities from Pompeii, Cathedral, drive to Castle of St. Elmo for view of the Bay, visit Pompeii, Herculaneum, Vesuvius, Posilipo, Pozzuoli, Baia, with their ruins of temples, theaters, baths, etc.); embark at Naples; Messina (remarkable beauty of scenery, harbor, churches, manufactures, history—cause of first Punic War); Crete, or Candia, (legend of the Minotaur, conquered by Rome 67 B. C., by the Crusaders, insurrections, especially the recent one); Alexandria (site, harbor, population, industries, Mehmet Ali Square, history,—library, Temple of Serapis, Conquered by Rome, bombardments in 1882, remains of ancient grandeur,—Pompey's Pillar(?), catacombs, and the obelisks now in London and New York); Port Said; Suez Canal (description, history, effect of canal on climate of surrounding country); Red Sea (difficulty of navigation, coral reefs, Straits of Bab el Mandeb—meaning of name); Indian Ocean; Ceylon (oyster banks, cinnamon plantations, Adam's Peak); Singapore (harbor, Chinese quarters, botanical garden, Mohammedan mosque); China Sea; Tokio (moats, canals, citadel, Buddhist temples, Imperial University, street scenes—jirikishas); Behring Sea (seal fisheries—description of the industry, recent troubles between England and United States.)

Only a few special points are mentioned in connection with each place, but a general description and history should be given of each, such as can be found in any cyclopedia, and fuller, in books of travel concerning the special places.

Ocean travel in general should be described, and also the special features attaching to each of the bodies of water passed over.—A full study should be made in this instance of the seal fisheries, the interest of the trip culminating there.

GAME

KNOWLEDGE SEEKERS.

This game can be made to serve as a question box in connection with the Required Readings or with the Table Talks proposed in the *Suggestive Programs*, or it may follow its original design and be used simply for recreation. The circle is to be divided into two sides. Two different kinds of blank cards are distributed, the first division securing one kind and the second the other. The cards are to be numbered so that there will be one of each kind bearing the same number. Slips of paper must also be distributed. Each person is to write a question on the card; when all are ready the two whose cards bear the same number exchange, and each is to write on the slip of paper the answer to the question received. Those answering correctly receive a credit mark and the strife is to see which side will gain most credits.

THE CHAUTAUQUA CORNER.

To solitary readers connected with the C. L. S. C. a corner of the space devoted to suggestions will henceforth be given. It is hoped that the matter found here from month to month will help them to cultivate better mental habits and stimulate to a richer intellectual life. We call it "the Chautauqua Corner," Bishop Vincent's happy suggestion made long ago that each reader have a corner where his table, book-rack, and reading-chair are placed, has been adopted by hundreds. It is for this corner that the hints we drop each month are intended.

In beginning the year's reading, consider the benefit of following Henry Ward Beecher's habit referred to last month in the *Outlook*, and let every paragraph induce to reflection. This habit may be stimulated by constantly comparing each new point with what you already have read, observed, or thought on this subject, and collecting your stock in mind where you can use it. You will find the fact on which you bring the light of all that is in your mind at all like it, wonderfully broadened and illuminated. For example, Ely's Political Economy is in reading and you have reached the paragraph on the growth of the factory system (page 56). Perhaps it has never occurred to you that the factory system is a new thing. Call in personal observation and you will recall that from ten to twenty years ago the factory in your town or the neighboring one was built, and you can trace dis-

tinctly the changes it made. Here enlist in conversation an "old inhabitant," and the course of industrial growth for a long period can be traced vividly. Write out the matter gained. It will be a valuable personal observation on the subject. Roman history is in reading at the same time and the lack of any industrial life in the modern sense will be evident by reading the first chapter in the Outline History and the articles from Dr. Adams and Principal Donaldson in the October issue of THE CHAUTAUQUAN. You can with profit ask yourself who made the early Roman's cloth, pottery, ironware, and chariots. Helen Campbell's article in the same

issue will furnish a picture of one of the saddest results of the system. If you have received the *Assembly Herald* for 1889 you will remember the references in the syllabi of Dr. Ely's University-Extension lectures. Probably you will find that your desultory reading has given you items on the subject, hunt them up. If you have adopted the system of note-taking suggested in the October issue of the magazine (p. 103), tabulate your references and file your cards under the head of Factory System. On the margin of your book place a reference mark which you will understand as calling attention to the fact that you have material on the point.

C. L. S. C. NOTES ON REQUIRED READINGS.

FOR NOVEMBER.

"OUTLINE HISTORY OF ROME."

P. 61. "Quintus Fabius Pictor." (— 216 B. C.) The most ancient Roman historian, called "the father of Latin history." His work, the "Annals of Fabius Pictor," began with the landing of Æneas in Italy and was carried down to his own times; but only a few fragments of it are now extant.

"Dionysius". Of Halicarnassus. (About 70-7 B. C.) A celebrated rhetorician and historian, born in Greece, but who settled in Rome about 29 B. C. Although he became familiar with the Latin language, he wrote his principal work entitled "Roman Antiquities," in Greek. This work in twenty-two volumes contained the history of Rome from the mythical times to 264 B. C.

P. 65. "Debt." Livy in his history book V, chapter 23, tells the story of a brave debtor who had been a valiant soldier, but, notwithstanding, on his return from war had been seized and imprisoned. In 495 B. C. he broke out from prison, and passing through the streets in his rags, and clanking his chains, proclaimed his wrongs. His countrymen were stung to madness, and war with the Volscians at that time being imminent, they refused to enlist. The plebeians helped other debtors to escape and a revolution was threatened. The patricians were forced to redress the grievances of the poor, and more lenient laws were passed only to be broken as soon as the war was over. But the people had seen their power, and very soon after, followed their secession to the Sacred Mount.

P. 67. "Coriolanus." The story of this hero forms one of the most interesting of the early legends. There was a famine in Rome, and corn had been sent from Sicily for the people, but

Coriolanus advised that it should not be distributed unless they gave up their tribunes. For this he was banished. In revenge he led the Volscians against Rome. Dissuaded from his purpose by the entreaties of his wife and mother, he led his army back, and, according to one tradition, was put to a cruel death by the Volscians. (See Shakspeare's play called "Coriolanus.")

P. 68. "The Fabii." A renowned patrician family who espoused the cause of the plebeians, and for this reason were denounced by their own class. When one of their number was consul the hatred ran so high against him on account of his efforts for the poor, that he and his whole family resolved to leave Rome. They decided to form a settlement on the banks of the Cremera, a small stream which flows into the Tiber a little above Rome. After two years they were attacked by the Volscians, and the whole family, 306 in number, were cut off except one child who had been left behind at Rome, from whom the later Fabii were descended.

P. 70. "Lucius Dentatus." Called also Sicinius. He was said to have fought in one hundred twenty battles, to have killed eight of the enemy in single combat and to have attended the triumphs of nine generals. In 454 B. C. he was tribune of the plebs, and because he incited them to secede to the Sacred Mount he was murdered.

"Virginia." Icilius, the framer of the law called after him, was the lover of Virginia. After her father had freed her by death, Icilius holding her body up before the excited populace roused them to revolt.

P. 72. "Prodigies" of the Veian war. The following are two of them: (1) In the midst of an

autumn drought the waters of the Alban Lake, fifteen miles from Rome, rose and overflowed their banks and poured down on the plain below.

(2) The Romans, with great skill dug a tunnel underneath Veii, through solid rock for a distance of a mile and a half. It opened directly under the temple of Juno, the tutelary goddess of the Veians. Just as the opening was to be made the Veian king was consulting the gods, and had been told that he should be victor who should first offer sacrifice on the altar before him. The Romans at work on the tunnel, hearing these words, immediately burst through directly beneath the altar and struck down the victim ready to be offered.

"Juno's geese." These geese were held sacred to the goddess and were kept in the capitol for use in the worship of Juno. The Gauls had climbed up the hill, and, the watch having fallen asleep, they would soon have been in possession had not the disturbed geese awakened Marcus Manlius, the consul, who springing quickly forth met the first Gaul and hurled him back over the edge of the cliff. This one striking his companions in his fall, and they again striking others, all the daring climbers were sent down the precipice to their death. In the morning the guard who failed in his duty was hurled after them.

P. 87. "Xanthippus." A Greek mercenary. He showed the Carthaginians that it was to the inefficiency of their generals and not to the superiority of the Roman arms, that they owed their defeat at Ecnomus. So great confidence did he inspire that he was placed at the head of the army, and led it on to the brilliant victory.

P. 94. The "trap" at Lake Trasimenus. See "Latin Courses in English," p. 222.

P. 100. "Darius," Hystaspis. The king of Persia, 521-486 B. C.

"Xerxes." The son of Darius, who ruled as king, 485-465. Darius died while preparing to make war against Greece, and it was the first care of Xerxes to conquer that nation.

P. 101. "Illyrian pirates." To secure her own coasts on the Adriatic, Rome had to hunt down the pirates on the opposite shores, where the numerous bays and inlets afforded them a strong shelter. Greece had suffered greatly from these marauding bands, and Rome in conquering them had done also a great favor to the former country, and had gained its friendship to such a degree that the Romans were invited to take part in the Isthmian games, and were admitted to the Eleusinian mysteries.

"POLITICAL ECONOMY."

P. 154. "Thomas Aquinas." (About 1225-

1274.) A saint of the Latin church, surnamed the Angelic Doctor, and a great scholastical teacher. Born of a noble family, he joined the order of St. Dominic, or the Preaching Friars, at the age of sixteen. His great talents and attainments soon made him famous all over Europe. He passed some years at Rome and at Paris, and left many writings on theological, moral, and metaphysical subjects. Fifty years after his death he was canonized, and the festival founded in his honor is celebrated on March 7.

"Adam Ferguson." (1724-1816.) A Scotch metaphysician and author, professor of both natural and moral philosophy in the University of Edinburgh. For some years he served as chaplain in a highland regiment. In 1778 he was sent to America as secretary for the five commissioners who came to negotiate a peace with the revolted colonies.

"M. de Laveleye" (lav-lâ), Émile Louis Victor. (1822-) A Belgian economist, professor of political economy at the Liege University.

P. 162. "Malthus," Thomas Robert. (1766-1834.) An English classical scholar, educated at Cambridge; the rector of a parish in Surrey. In 1826 he published the work on which his fame rests, his "Essay on the Principle of Population," in which he advanced the theory set forth in the text-book. He traveled throughout Europe in search of facts to confirm this theory.

P. 167. "The Norman Conquest." The victory gained over the English (the Saxons) in 1066 by the Northmen who in 918 had settled in a part of Gaul (now France) and had bestowed upon the land granted them there the name of Normandy. William, the Duke of Normandy, claimed that King Edward the Confessor had promised that he should succeed to the throne of England, as Edward left no heir and William was nearest of kin. But the assembly of the leading men of the nation called Harold, son of the famous Earl Godwin, to be king. William thereupon raised an army, attacked the English at Hastings, gained a great victory, and shortly after, on Christmas day, 1066, was crowned king.

P. 181. "Juvenal." See Latin Courses in English, pp. 394-410.

P. 183. "Middle Ages." This period of time "includes the long interval between the first general irruption of the Teutonic nations toward the close of the fourth century, to the middle of the fifteenth century, when the modern era, with a distinctive character of its own began."—G. P. Fisher.—"The term Middle Ages is applied to the period of several centuries separating the ancient and modern epochs of European history, considered by some as extending

from the fall of the Western Empire in 476 to the discovery of America in 1492; but other nearly synchronous events have been fixed upon for the beginning and end of the period."—*The American Cyclopædia*.

P. 184. "Francis A. Walker." (1840—.) An American statistician. He served in the Civil War, attaining the rank of colonel. For some years he was professor of political economy and history at Yale, and in 1881 was elected president of the Massachusetts Institute of Technology. His writings include annual Reports as Superintendent of the ninth and the tenth census, and as Commissioner of Indian Affairs. He has also published several books.

P. 186. "Wampum." The money of the North American Indians consisting of small beads made of shells.

P. 196. "Professor Roscher." (1817—.) A German political economist. (For the works of this and other authors referred to, see the "Bibliography," in the text-book, pp. 344-348.)

P. 201. "Clearing-houses." The system employed in the clearing-house of Philadelphia which is considered on the whole superior to that of any other in the United States is described in "The American Cyclopædia" as follows: "The clearings are made each morning at 8.30, just before which hour a messenger and a clerk from each bank are at the clearing-house. The clerks take their seats inside a series of desks arranged in the form of a hollow oval. Each messenger brings with him from his bank a sealed package for each other bank, containing all the checks or drafts on such bank. The name of the bank sending and that of the bank to which it is sent are printed on each package and the amount sent is written thereon. The messengers take their places near the desks of their respective banks and they have with them tabular statements of the amount sent to each bank and their aggregates. These are exhibited to the respective clerks and noted by them on the blank forms. By 8.30 precisely the manager calls to order and gives the word, when all the messengers move forward from left to right of the clerks, handing in to those clerks the packages addressed to their respective banks and taking receipts for them on their statements. When the circuit is completed, all the packages have been delivered and received, and the amounts and the aggregates, both debtor and creditor, noted by the clerks. When the clerks find all correct the messengers take the packages received, and return to bank. The several clerks then pass round a memorandum of the debits, credits, and balance, each of his respective bank. When these memoranda have made the circuit, each

clerk has on his statement the debits, the credits, and balance, whether debtor or creditor, of each bank. If these debits and credits and debtor and creditor balances are found to balance, the clerks now leave the clearing-house. If not, they remain until the error or errors are discovered. The balances due by the several banks are paid in to the clearing-house that day by 11.30 a. m. and are receivable by the creditor banks by 12.30 p. m. A second clearing of drafts, etc., received by the morning's mail, is made at the clearing-house by the messengers at 11.30 a. m." See also full description given by Dr. Adams in *THE CHAUTAUQUAN* for November, 1888, p. 95.

P. 205. "Henry C. Carey." (1793-1879.) The author of several important works pertaining to political economy. "He is recognized as the founder of a new school of political economy, which substitutes for the 'dismal science' of Malthus and Ricardo a philosophy of physical, social, and political progress."

P. 208. This fearful pestilence, which appears to have been the Oriental plague, swept over all Europe, and it is said that in England during the years 1347-1349 one half of the population perished.

VANDYKE'S "HOW TO JUDGE OF A PICTURE."

P. 88. "Instantaneous photographs," etc. To Mr. Muybridge, a photographer of San Francisco, belongs the honor of perfecting an automatic electro-photographic apparatus for picturing the movements of a running horse. After the exhibition in London of Miss Thompson's celebrated picture, "The Charge at Balaklava," a discussion was carried on in the English newspapers concerning the position of the legs of a horse in full motion, some declaring that this artist's representation was unnatural, others that they were correct and that "the conventional postures of all previous artists were untrue to nature." Mr. Muybridge settled the dispute by the evidence of his photographs, which surprised both sides. "In taking the negatives he employs a series of cameras operated by electricity, and so placed as to fix with absolute accuracy the several phases in the continuous action of the horse while making one stride. The exposure for each negative is about the two thousandth part of a second. . . . In none of these pictures do we recognize anything like the conventional figure of a trotting horse in motion."

P. 90. "Procrustean." Reducing by violence to an exact measure or model. An adjective derived from Procrustes, a legendary highwayman of Attica. His proper name was Damastes, or according to some, Polypemon. He had an iron bedstead upon which he was accustomed to tie all travelers

who fell into his hands. If they were too short to fit the bed exactly he stretched them out to the required length; if they were too long he reduced them to the right standard by cutting off their legs. For this reason he was surnamed Procrustes, a Greek word meaning the stretcher.

P. 96. "Hamlet," "The Lady of the Lake," or "Adam Bede." One of Shakspeare's grandest dramas, one of Walter Scott's finest poems, and one of George Eliot's best novels.

P. 97. "Leonardo." The full name is Leonardo da Vinci, for which see the Biographical Index of Artists pp. 161-168.

P. 101. "Trollope," Anthony. (1815-1882.) An English novelist.

P. 106. "Harvey Birch." The hero of Cooper's novel "The Spy," which was founded on incidents occurring in the Revolutionary War. William Cullen Bryant says of this book: "His [Cooper's] power in the delineation of character was shown in the principal personage of his story, Harvey Birch, on whom, though he has chosen to employ him in the ignoble office of a spy, and endowed him with the qualities necessary to his profession—extreme circumspection, fertility in stratagem and in the art of concealing his real character—qualities, which in conjunction with selfishness and greediness make the scoundrel, he has bestowed the virtues of generosity, magnanimity, an intense love of country, a fidelity not to be corrupted, and a disinterestedness beyond temptation. Out of this combination of qualities he has wrought a character which is a favorite in all nations and with all classes of mankind."

"Cooper," James Fenimore. (1789-1851.) One of America's greatest novelists. William H. Prescott says of him, "His writings are instinct with the spirit of nationality. In his productions every American must take an honest pride. For surely no one has succeeded like Cooper in the portraiture of American character, or has given such glowing and eminently truthful pictures of American scenery."

P. 107. "The Sistine Chapel." The palace of the Vatican is rather a collection of separate buildings than one single large edifice, and among the most beautiful of these structures is the Sistine Chapel. It was built by Pope Sixtus IV. (1414-1484), and afterward decorated in his honor by Pope Julius II. (1441-1473.)

"The Sibyls and Prophets." "The paintings of the [Sistine] ceiling illustrate the Creation and the Fall of Man, together with other scenes and figures typical of the Redemption. The middle part of the ceiling is divided into nine compartments containing the Creation of Eve (placed in the center as symbolizing the

Woman from whom Christ was born); the Creation of Adam; the Temptation, Fall, and, Expulsion, in one composition; The Separation of Light from Darkness; the Gathering of the Waters; the Creation of the Sun and Moon; the Deluge; the Thanksgiving of Noah; and the Drunkenness of Noah. At the corners of the ceiling are four designs of the great deliverances of the Children of Israel: the Brazen Serpent; David and Goliath; Judith and Holofernes; and the Punishment of Haman. There are six windows on each side of the chapel; the lunettes which surround them and the spaces above them are occupied by groups of the ancestors of Christ. Between the windows, at the springing of the vault, are colossal seated figures of the Prophets and Sibyls who foretold the coming of the Savior. They are arranged alternately as follows: Jeremiah, Persian Sibyl, Ezekiel, Erythrean Sibyl, Joel, Delphic Sibyl, Isaiah, Cumæan Sibyl, Daniel, Libyan Sibyl; Jonah and Zechariah, and placed between the historical compositions at the angles of the ceiling."—*Classic and Italian Painting*.

P. 111. "Phidias." (About 490-432 B. C.) The greatest sculptor of Greece, if not of the world, whose works adorned the Acropolis of Athens.

"Kant," Immanuel. (1724-1804.) A profound German metaphysician, the founder of the Transcendental school of philosophy. His great philosophical system is developed in his most famous work, "Critique of Pure Reason."

"Hegel," (hā-gēl), George Wilhelm Friedrich. (1770-1831.) An eminent German metaphysician. It is generally thought that Hegel's system fitly completes the great philosophical edifice for which Kant laid the foundations. It would be impossible in a note to give even the merest outline of either of these vast systems.

P. 117. "Canova," Antonio. (1757-1822.) A renowned Italian sculptor.

P. 118. "The Old Pinacothek." A picture gallery. There are in it about 1,300 paintings, comprising the best works of the royal collections. The building is divided into nine halls and twenty-three apartments. Many of the works of the master artists are found in it.

P. 120. "Lady Dedlock." A character in Dickens' novel "Bleak House."

"Jean Valjean." The leading character in Victor Hugo's great novel *Les Misérables*.

"Goethe," von (fon gö-eh). Johann Wolfgang. (1749-1832.) A most illustrious German writer both of prose and poetry. Professor G. P. Fisher says of him, "By the universality of his genius, which was equally exalted in the sphere of criticism and of original production, Goethe is by

common consent the foremost of German authors. His dramas are the most celebrated of his poems; but many of his minor pieces are marked by exquisite harmony and beauty." He is best known through his "Faust," and his autobiography.

P. 124. "Childe Harold." The hero of one of Lord Byron's longest and finest poems which is named from the hero.

P. 128. "Soubrette." A chambermaid, or female servant.

P. 140. "Coleridge," Samuel Taylor. (1772-1834.) A great English poet and critic. He with Southey and Lovell, two college friends, conceived a scheme of emigration to America, purposing to found there an ideal commonwealth in which "a community of goods was to be enjoyed and from which selfishness was to be proscribed." For want of capital, however, this dream was never realized. In 1800 he joined Southey and Wordsworth who were living in Keswick and the three became known as the Lake Poets. Coleridge was of a reckless, roving disposition, and after a few years he left his wife and daughter dependent on Southey, who had married a sister of his wife, and gave himself up to a wandering life. The "Ancient Mariner," "Christabel," and "Table Talk" are his best known works.

P. 146. "Dumas" (dū-mā), Alexandre. (1803-1870.) A noted French novelist.

"Sue," Eugene. (1760-1830.) A French novelist, whose writings have been widely condemned on account of immoral tendencies. Among his most famous books is "The Wandering Jew."

"George Sand." (1804-1876.) The assumed name of Amantine Lucille Dupin, afterward Madame Dudevant, a noted French novelist. Her books have been severely criticised also as being im-

moral. She was an advanced liberal in politics, professed to be a socialist, and denounced the conventional system of marriage. At the beginning of her literary career—which she adopted as a means of subsistence for herself and two children, having given up her fortune to her husband when she separated from him—she adopted the costume of the male sex.

"Hugo," Victor. (1802-1885.) The widely known French poet and novelist. In 1841 he was admitted to the French Academy and four years later was raised to the rank of a peer. He was a strong supporter of the Revolution of 1848. For his opposition to the *coup d'état* of 1851 he was banished, but after the fall of the empire he returned to Paris. His greatness was confined to no one branch of literature.

"Howells," William Dean. (1837—.) An American author, noted for his refined style and clear delineation.

"James," Henry. (1843—.) An American novelist and critic, one of the foremost of the recent writers.

"Poe," Edgar Allen. (1811-1849.) A distinguished American author.

"Stevenson," Robert Louis. (1850—.) A Scotch novelist.

P. 151. "Mr. Hamerton," Philip Gilbert. (1834—.) An English author, and art critic.

P. 154. "Fresco." A method of painting on walls, done with water-colors on fresh plaster.

"Tempera." Painting done with the colors mixed with the white of egg, or some glue-like substance, instead of with oil, and used for wall-paintings.

"Sepias." Pictures having rich brown colors, tinted with a pigment which was formerly supposed to be made of the ink of the sepia, or cuttle-fish.

"Monochromes." Paintings of one single color.

QUESTIONS AND ANSWERS.

ON THE C. L. S. C. TEXT-BOOKS.

VINCENT AND JOY'S "OUTLINE HISTORY OF ROME."

1. Q. What is true of the early history of the Roman republic? A. It is as rich in fanciful legends as were the stories of the kings.

2. Q. Who are mentioned among the historians of this early time? A. Pictor, Livy, and Dionysius.

3. Q. What was taking place within the walls of Rome during the first period of the Republic? A. Patricians and plebeians fighting face to face for political equality.

4. Q. What at the same time was occurring outside of the city? A. Patricians and plebeians were fighting side by side to extend the territorial authority of Rome.

5. Q. Upon whom was the chief magistracy bestowed in the time of the Republic? A. Two patrician consuls of equal authority who held office for a year.

6. Q. Under the monarchical system what assembly of the citizens was held? A. The Comitia Curiata.

7. Q. What two assemblies were added to

this under the Republic? A. The Comitia Centuriata, and the Comitia Tributa.

8. Q. What was the Roman law regarding debt? A. It gave the debtor as a slave to the creditor.

9. Q. What made debt inevitable to the lower classes of this period? A. All soldiers were compelled to serve without pay and all the booty of successful warfare went to the patricians.

10. Q. What great event took place in 494 B. C.? A. The plebeians declared themselves independent and planned to found a new city, which forced the patricians to a compromise.

11. Q. What name was given to the hill upon which the seceding plebs had encamped? A. The Sacred Mount.

12. Q. What did the disorders of this revolution cost Rome? A. Her place for a time at the head of Latium.

13. Q. What did the first Agrarian law provide? A. That all public land should be surveyed and a part of it distributed among the needy citizens.

14. Q. What was the fate of Spurius Cassius the originator of the law? A. He was condemned and executed as a traitor.

15. Q. Who were the Decemvirs? A. A committee of ten elected for one year to supersede the consuls and tribunes, to prepare a new code of laws, known as the Twelve Tables.

16. Q. What led to the second secession of the plebs? A. The Decemvirs refused to disband when their work was done and with Appius Claudius at their head ruled as tyrants.

17. Q. What law passed 445 B. C. bridged the gulf between the patricians and the plebeians? A. That legalizing marriage between the two orders.

18. Q. In what campaign did the citizen soldiery of Rome first receive pay? A. In that made against the town of Veii.

19. Q. What finally leveled all political distinctions between the Roman classes? A. The Licinian law and its sequels.

20. Q. What distinguishes this complete revolution in the Roman constitution from similar results achieved in other countries? A. It was fought in legal forms without fire and sword, and was accomplished without anarchy.

21. Q. For how long was the constitution of Rome in process of development? A. Two hundred years.

22. Q. What three races did Rome conquer in war between the years 375 and 275? A. The Etruscans, the Samnites, and the Sicilian Greeks.

23. Q. In what year was the Latin league dissolved and the Latin State ended, leaving Rome triumphant over all the cities? A. 338 B. C.

24. Q. What became a fundamental doctrine of the Roman republic? A. To restrict as far as possible the rights of citizenship to the inhabitants of the city of Rome.

25. Q. Into what three classes of communities were the citizens of Italy outside of Rome divided? A. Into colonies, municipalities, and allies.

26. Q. What city was the first foreign rival of Rome? A. Carthage.

27. Q. When did Rome win her first naval battle? A. In 260 B. C. at Mylæ, against the Carthaginians.

28. Q. What did the treaty of peace made at the close of the first Punic War, award to Rome? A. All the Carthaginian possessions in Sicily and \$4,000,000.

29. Q. After twenty-three years what act broke the peace? A. Hannibal sacked Saguntum, a town under Roman protection.

30. Q. What were Hannibal's plans of attack? A. To seduce the Roman allies from their allegiance, and then crush Rome itself.

31. Q. At what three places were masterly victories gained by Hannibal in battle? A. Trebia, Lake Trasimenus, and Cannæ.

32. Q. What name did his policy of warfare confer upon the dictator Fabius? A. That of *cunctator*, delayer.

33. Q. What famous Roman general defeated Hannibal and ended the Second Punic War? A. P. Cornelius Scipio, surnamed on account of his victory, Africanus.

34. Q. What did the second treaty of peace cost Carthage? A. All claim to territory outside of Africa, Numidia, her fleet, and an annual tribute.

35. Q. What caused the first Macedonian War? A. Hannibal's attempt to gain the alliance of Philip V., King of Macedon.

36. Q. What relations were established between the Southern Greeks and the Romans by the two Macedonian Wars? A. Those of friendship; the consul Flaminius soon declared the Greek cities independent.

37. Q. What led the Romans to declare war against Antiochus? A. They thought that monarch's reception of Hannibal and his intrigues with him a sufficient ground for hostilities.

38. Q. How did Hannibal die? A. Having escaped to Bithynia after his defeat at Magnesia, he took his life by poison.

39. Q. At what battle was the Macedonian power broken by the Romans? A. Pydna, 168 B. C.

40. Q. When did the third Punic War begin? A. In 149 B. C.

41. Q. What was its result? A. Rome conquered, and Carthage was utterly destroyed.

42. Q. What two other illustrious nations expired the same year with Carthage? A. Greece and Macedonia.

43. Q. What tribe of savage mountaineers baffled Rome for the next ten years? A. The Lusitanians.

44. Q. Against what Spanish town were the Roman armies powerless for four years? A. Numantia.

45. Q. What peculiar significance had these minor Spanish wars? A. They showed that a demoralizing transformation was going on within Rome.

46. Q. What was the original agent of this corruption? A. The tribute money from Carthage and other subdued kingdoms.

47. Q. What formed a second germ of disease in the State? A. Slavery.

48. Q. Who are the impressive Roman figures of the epoch just considered? A. Cato and the two Scipios.

49. Q. To what was Cato bitterly opposed? A. To the flood of new ideas sweeping over Rome from conquered Greece.

50. Q. Over what territory had Rome achieved supremacy at this period? A. Over every country on the shore of the Mediterranean.

ELY'S "POLITICAL ECONOMY."

1. Q. What is the only operation man can perform upon matter? A. He can simply move it.

2. Q. What can he produce by this action? A. Quantities of utility.

3. Q. What is the economic term applied to the creation of utilities? A. Production.

4. Q. What is the term applied to the results of labor? A. Wealth.

5. Q. If the quantity of cotton cloth should double between two censuses, and the price fall one half, would the wealth of the country be increased? A. It would be doubled.

6. Q. What sets the limit to all production? A. The power of consumption.

7. Q. What supply motives of economic activity to man? A. His wants.

8. Q. Into how many classes may those things which man wants be divided? A. Into necessities, comforts, conveniences, and luxuries.

9. Q. What are luxuries? A. Whatever contribute chiefly to enjoyment, rather than to a better training of man's powers.

10. Q. What are the three factors of production? A. Nature, labor, and capital.

11. Q. Considered in an economic sense, what is meant by nature? A. Simply land.

12. Q. What is capital? A. Every laid-by product which may be used for further production.

13. Q. What tendency marks the development of industrial civilization? A. It becomes constantly more complex.

14. Q. What forms at present a characteristic feature in the organization of the productive factors? A. The division of labor.

15. Q. To what part of political economy is the name exchange applied? A. To that dealing with transfers of goods.

16. Q. What is value? A. The measure of utility.

17. Q. What is price? A. Value expressed in money.

18. Q. Upon what does price depend? A. Immediately, upon supply and demand; secondarily, upon cost of production.

19. Q. What is money? A. A universal standard of value and a medium of exchange.

20. Q. Under the different conceptions concerning it, what single form of money will pass as money in every sense of the word? A. Gold money.

21. Q. When is paper money said to be redeemable? A. When government pays coin for it on demand.

22. Q. How much paper money can be issued by a nation with safety? A. An amount equal to one-third of the government revenues payable in this kind of money.

23. Q. What effects follow the arbitrary decrease or increase of the amount of money? A. In the former case burdens are added to every debtor; in the latter, creditors are robbed.

24. Q. What is the established ratio between gold and silver in the United States? A. One to sixteen.

25. Q. What is meant by the term demonetization of silver? A. The withdrawing it from current use as full legal tender.

26. Q. What is meant by bi-metalism? A. The use of both silver and gold at a fixed ratio of value as legalized currency.

27. Q. On what condition only could the introduction of bi-metalism be regarded with favor by economists? A. That it become an international measure.

28. Q. What restriction does the Bland Bill lay upon the coinage of silver in the United States? A. Not less than \$2,000,000 or more than \$4,000,000 worth of silver must be coined every month by the mints.

29. Q. What is John Stuart Mill's definition of credit? A. Permission to use the capital of another person.

30. Q. What instrument of credit is known

as a check? A. An order on a banker by a person having money on deposit to pay to the bearer a certain specified sum of money.

31. Q. What is a draft? A. A check given by one banker against another.

32. Q. What are bankers? A. Middle men between borrowers and lenders.

33. Q. What banks are allowed to issue notes which circulate as money? A. National banks.

34. Q. What is a clearing-house? A. An institution designed to save for the banks of a city, time, labor, and circulating notes.

35. Q. What is protection as used in political economy? A. A regulation which lays a tax on all imported commodities when similar commodities can be produced at home.

36. Q. What are the two leading arguments of protectionists? A. The diversified-natural industry argument and the protection-to-infant industry argument.

37. Q. What are the leading arguments of free traders? A. That protection is not needed to accomplish either of the above mentioned ends; that it is not a benefit to the laboring man; and that it fosters monopolies.

38. Q. What reform is needed at the present time more than a tariff reform? A. That of municipal government.

39. Q. What have been far greater forces in adding to the wealth of modern nations than the tariff policy? A. Inventions and discoveries, especially the application of steam to industry.

40. Q. If it be true that American labor would be better off without it, why should the protective system not be removed suddenly? A. It is an historical growth which has taken deep root, and sudden removal would be dangerous.

VAN DYKE'S "HOW TO JUDGE OF A PICTURE."

1. Q. What faculties will enable one without an exact knowledge of art to form a fair estimate of the drawing in a picture? A. Good judgment and a sense of proportion.

2. Q. What prevalent figure in commercial pictures is accepted as a *bona fide* type of the *genus homo*? A. The studio dummy.

3. Q. To give the appearance of life and motion what do artists often do? A. Distort their drawings.

4. Q. How do race horses on the home stretch appear to the eye? A. As stretching out and hugging the ground; hence in a painting their bodies must be lengthened.

5. Q. What effects are produced by the "perfect line" in landscape? A. Nature is rendered rigid, statuesque, immovable.

6. Q. What is pictorial composition? A. The proportionate arranging and unifying of the

different features and objects of a picture.

7. Q. What must be true in art as in literature? A. All must be constructed with regard to the importance of the heroine or hero.

8. Q. What must be observed in composition next after the law of special prominence? A. The harmony of relation between the parts and their unity for one well-defined purpose.

9. Q. What other consideration must be marked in composition? A. The light must come from one point of the compass and affect all objects proportionately, and one atmosphere must surround the whole.

10. Q. What part of art has thus far formed the subject of consideration? A. Its *language*.

11. Q. What is the highest aim of art? A. To express the ideas, feelings, impressions, or beliefs of the artist.

12. Q. What prevalent idea regarding art is a false conception? A. That the object of painting is to imitate nature.

13. Q. To what is the painter who works simply to detail nature compared? A. To the camera.

14. Q. What is the object of all true art? A. To please, not to instruct.

15. Q. What features of life belong strictly to painting? A. Those of which the eye takes chief cognizance.

16. Q. To what height in art does the average of genius attain? A. To that which gives only suggestions of hidden meanings.

17. Q. What is the greatest height art can reach? A. The expression of one grand idea with such force that all else is forgotten.

18. Q. What is meant by an artist's style? A. Simply his manner of expressing himself.

19. Q. To a great extent to what has style in painting been limited? A. To the manner of putting on paint.

20. Q. In what is it often supposed that the excellence of a picture consists? A. In smoothness of surface and a fine finish.

21. Q. As a general rule (subject to many exceptions) what does finish in painting argue? A. A lack of breadth and simplicity and power.

22. Q. To what other kind of style is attention called? A. To that which shows the individuality of the man as well as the artist.

23. Q. In a certain sense of what is every picture a record? A. Of the artist's life; it is the autobiography of the man.

24. Q. What class of pictures furnishes the great field for "solid painting"? A. Figure compositions.

25. Q. How only can one acquire a full appreciation of art? A. By a close and continuous study of pictures.

THE QUESTION TABLE.

ANSWERS IN NEXT NUMBER.

WORLD OF TO-DAY—THE SEAL FISHERIES.

1. What group of islands supplies the world with seal-skins?
2. What company has the monopoly of these islands, and how much does it pay the United States Government for the privilege?
3. When were revenue cutters first sent to the neighborhood to watch for intruders?
4. From what ports have most of the vessels come that have been seized by the cutters?
5. How many seizures were made in 1887 and 1888?
6. What vessels were taken in 1889?
7. On what ground do Canadians criticise the recent seizures?
8. On what ground does the United States claim exclusive jurisdiction in Behring Sea?
9. What is the limit of lawful seal killing per year?
10. When was this limit fixed, and to what do experts say it may now be safely extended?
11. What ruined the great sealeries of the Antarctic Ocean?
12. Where does the seal spend the different parts of the year?
13. At what time is the fur right for the uses of commerce?
14. To what processes must the fur be subjected before it is ready for wear?
15. What country is the chief dyer and manufacturer of seal-skins?

THE ROMANS AS HOUSEKEEPERS.

1. Why was the *atrium* of early Roman houses so called?
2. What were the general architectural arrangements of a Roman *domus*?
3. What flowers were the main ornaments of Roman pleasure-grounds?
4. What were the principal works of improvement successfully accomplished by the Romans in ancient times for the benefit of public health and for checking malaria?
5. When did the introduction of pure drinkable water into Rome take place?
6. What defects of the ancient Roman sewage system are found in that of many modern cities?
7. What were the provisions for preventing the spread of conflagrations, and what took the place of fire insurance companies?
8. What official was authorized to examine the water supply of the kitchens in every house, and

to see that the furnace and heating apparatus worked properly?

9. In what kind of houses did the poorer classes of tradesmen and artificers live?
10. What was the food of the poorer classes?
11. Among the wealthy classes what usually occupied the hour preceding the dinner?
12. At what time was the dinner served and of what courses did it consist?
13. What were some of the duties of a slave at a Roman banquet?
14. How does Juvenal ridicule the professional meat-carver of his time?
15. What animals considered a presence of good omen, were kept by the Romans as household pets?

PRONUNCIATION TESTS.—II.

1. Ada Addison the amiable artist aided in adding the accounts.
2. Banquo the black boot-black bade the blithe Bassanio beware.
3. Cecil ceaseth crying.
4. The depths of despair deafen him to all else.
5. Every error erased is excellent.
6. Five foolish freeman freely filched and falsely fought.
7. The genial genius gradually grew grander.
8. Thou hard'n'dest thy heart and hurl'dst thy spear and harm'dest the heathen.
9. Inimitable images impiously intrude.
10. The jovial jury joyfully joined the jubilee.
11. Katherine Kellogg cried cruelly when Cassius captured and kept her kitten.
12. The languid languisher languisheth the livelong day.
13. The monk made microscopic mosaics.
14. The naughty novices nonchalantly nonplussed the nice novitiates.
15. The official officiates in an officious manner.

PHYSICAL GEOGRAPHY.—II. GEOGRAPHIC CONDITIONS.

1. From what three causes may mountains arise?
2. What forms characterize those of different origin?
3. What is the distance from the greatest depth of the sea to the tops of the highest mountains?
4. In representing the earth by a globe six

feet in diameter, how far below the highest mountain tops would the deepest ocean bed be, if correct proportion was observed?

5. What mountain and neighboring valley present the sharpest contrast of elevation in North America?

6. What agencies are constantly at work leveling the surface of the earth?

7. What is the result of the erosion of a river whose course is across outcropping edges of strata differing in hardness?

8. What is proved by the existence of shells in the strata near the top of the Niagara River gorge, similar to those in Lake Erie?

9. What American river gorges are the most remarkable in the world?

10. What conditions favor and what prevent the formation of a delta?

11. At what rate is the delta of the Mississippi advancing into the Gulf of Mexico?

12. What European rivers furnish illustrations of delta growth?

13. At what rate is the Tiber advancing its coast-line, and how far inland is the ancient harbor of Ostia?

14. What portions of the earth's surface are steadily sinking?

15. To what is due the existence of the great plains of the earth's surface?

SPECIAL MEMORIAL DAY.—ROMULUS.

1. What name did the Trojan Æneas give to the city he founded in Italy?

2. What city did Ascanius the son of Æneas found?

3. Who was the woman, Roma, from whom, according to an old legend, Rome was named?

4. According to the account which says the mother of Romulus and Remus was thrown into the river with her boys, what became of her?

5. Under what tree, held sacred for many ages, was the trough containing the boys finally stranded?

6. What bird is said to have fed and constantly watched over Romulus and Remus?

7. How was the quarrel between the brothers as to the location of the new city settled?

8. From what is the English word palace derived?

9. According to Ovid, what was the "wall" over which Remus leaped?

10. To what does Plutarch trace the origin of the Latin word *celeris*, from which our word celerity is derived?

11. How many years passed between the landing of Æneas in Italy and the founding of Rome?

12. What day was celebrated by the Romans as the birthday of their city?

13. How long after the city was built did the Romans steal the Sabine women?

14. How had Romulus, previous to this time, provided the city with men?

15. How was the conscience of Romulus appeased after the death of his brother?

16. How long did Romulus rule over Rome?

17. How did Romulus end his life on earth?

18. To whom did Romulus appear after he had become deified, and predict that Rome would become the greatest city in the world?

19. Under what name was Romulus worshiped?

20. Where was a temple built in his honor?

ANSWERS TO QUESTIONS IN THE CHAUTAUQUAN FOR OCTOBER.

THE PARIS EXPOSITION.

1. The French Revolution. 2. May 5 to October 31, 1889. 3. The state in alliance with a guarantee society. 4. All tickets are one franc. From 8 to 10 a. m. two separate tickets must be presented; from 10 a. m. till 6 p. m. a single ticket suffices; after 6 p. m. two tickets are necessary. 5. The park of Trocadero, the Champ de Mars, and the Esplanade des Invalides. 6. 1. Fine Arts; 2. Liberal Arts; 3. Furniture; 4. Clothing; 5. Raw Materials; 6. Machinery; 7. Food; 8. Agriculture; 9. Horticulture. 7. 1380 by 375 feet, the largest building under one roof in the world. 8. Three-fourths for France, the remainder divided among Great Britain, United States, Belgium, and Switzerland. 9. Telegraphic, telephonic, phonographic, physical, electric lighting, underground conductors, lamp manufacture, electrical separation of metals, electric meters. 10. Over 4,000. 11. The United States. 12. Hindoo, Hebrew, Phœnician, Syrian, Egyptian, Etruscan, Huns, Scandinavian, Roman, Byzantine, Russian, Slav, Arabian, African savages, American Indians, Laplanders, Esquimaux, Aztecs, and Incas. 13. 984 feet. 14. The Washington Monument. 15. The locks of the Panama Canal and the framework of the Bartholdi statue.

THE ROMANS AS ENGINEERS.

1. Sixty. 2. Anio Novus, having a course of 62 miles, 48 of which were underground. It was built by Claudius. 3. The Pons sublicius celebrated for the combat of Horatius Cocles, a Roman knight who saved the city by his defense of this bridge. 4. The breakwater was not built far enough out at sea to shelter the entrance, but on the line connecting the ends of the jetties, leaving the two entrances exposed to the force of the waves. 5. A large ship was moored over the place and filled with concrete until it sank. This foundation was then

strengthened by a girdle of rocks. 6. Trajan. 7. Besides the Trajan Harbor he bridged the Danube at its widest part, constructed the harbors of Ancona and Civita Vecchia, and the Trajan Aqueduct. 8. Large polygonal blocks of the hardest stone accurately fitted together so as to appear like a solid mass. The substructure was solidified by cement. 9. Augustus. 10. Those of Titus, Septimius Severus, and Constantine. 11. Three: that attributed to Romulus and Remus which surrounds the Palatine; that of Servius Tullius which encircles the Seven Hills; that of Aurelian and Honorius which forms the inclosure of the city at the present time. 12. Tarquinius Superbus. 13. 127½ feet, exclusive of the statue on its summit; thirty-four pieces. 14. About 80,000. 15. Those of Caracalla and Diocletian.

CLIMATAL CHANGES.

1. Distance from the equator; height above the sea; distance from the sea; prevailing winds. 2. Distance from the equator. 3. The line that marks the height below which all the snow that falls annually melts in summer; determined by distance from the equator; by exposure to the sun's rays of the slope of the mountain; by situation with reference to the rain-bringing winds; by the steepness of the slope; and by the dryness or wetness of the district. 4. Partly by direct radiation from the sun, and partly by return from the earth. The amount conducted from the earth's hot interior, through its crust, to the air, is very limited. 5. — 460° Fahrenheit. 6. 1° Fahrenheit for every 180 feet at the equator, diminishing as we approach the poles and also as we ascend. Owing to moisture in the air, the rate is only about 1° Fahrenheit for every 300 feet near sea level. 7. Sand being a poor conductor, the heat produced by the sun's rays is conveyed downward into the soil slowly, and must necessarily remain longer in contact with the atmosphere. Similarly at night, the cooling effects of terrestrial radiation being greatest on a sandy surface, the nights are comparatively cold. These fluctuations are further intensified by the great dryness of air over extensive tracts of sand. 8. They make the nights warmer and the days cooler. 9. They mitigate in some degree the cold of winter. 10. If the range is perpendicular to the winds, it drains their moisture, rendering the winters colder and summers hotter to leeward as compared to windward.

11. The winds come laden with moisture, but the temperature of the region is not low enough to precipitate it. 12. The coast from Alaska to Lower California. 13. The short nights afford little opportunity for radiation of the heat accumulated during nineteen hours of sunshine. 14. 14 hours, 15 hours, 19 hours, between two and three months. 15. Sir William Herschel and Alexander von Humboldt.

ADAM SMITH.

1. Scotch. 2. He was carried off by Gypsies. 3. Dr. Johnson's Dictionary. 4. Father Adam. 5. His book "The Wealth of Nations." 6. The opportunity it would afford him for collecting facts for this book. 7. The opening of the Revolutionary War. 8. It must be classed among the greatest of books. 9. Sir James Mackintosh. 10. Labor. 11. That every one wishing to enter upon a trade be required to pass a test examination. 12. Landlords, laborers, and capitalists. 13. David Hume. 14. William Pitt. 15. The French Revolution. 16. At first warmly participating in them, he became one of their leading opponents. 17. The absent mindedness which led him to talk to himself. 18. Much of his ample fortune was spent in secret charities. 19. A "beau in his books." 20. His mother.

NOTE.—*The Question Table* is not a required part of the C. L. S. C. work. It is designed as supplementary to the regular work, and is to be used at the inclination of the reader. The subjects chosen are selected to harmonize with topics of the day and the current readings. Thus in the present issue questions are presented on the Seal Fisheries, in order that readers may get at the central facts in that matter. As the *Suggestive Programs* introduce a trip to the Seal Fisheries this month, this set becomes of practical value to those who follow the programs definitely. To assist in gathering material for observing the Special Memorial Day a monthly set of questions is given. The questions on Roman customs are of particular interest, as are also those on physical geography, because of the space given to the subjects in the Required Readings. Last year numbers of circles used the "Pronunciation Tests," and found them helpful. As a diversion in circles or for those who read alone, *The Question Table* has its greatest value.

THE C. L. S. C. CLASSES.

1882—1893.

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"Redeeming the Time."

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Items for this column should be sent to Miss G. L. Chamberlain, Plainfield, N. J.

CLASS FLOWER—THE TUBEROSE.

THE PRESIDENT'S TALK.—Fellow class-mates: Three years have gone by since we began our work as members of the Class of '90. They have been happy and profitable years to the most of us. We have enjoyed our readings in English, American, and Greek history and literature. We have been greatly profited as we looked into geology, astronomy, and chemistry. Indeed every book in the course has been of such value that we could not think of dropping one from the list. And now the last year of our course is reached and thousands of us are looking forward with anticipation to the time next summer when we hope to receive our diplomas. Out of the twenty-five thousand who formed our class three years ago, how many will continue faithful to the end?

Some, no doubt, have already given up the race. Many others, it may be, are somewhat behind in their reading and, as a consequence, are discouraged about being able to catch up during the year. I ask all such members to read and re-read the third C. L. S. C. motto. We have ten months yet before us. What can we not do in ten months, if we will determine on it? "Where there is a will there is a way." "Never be discouraged." Cannot some of us rise one half hour earlier in the morning, and during six days in the week, devote that time to our back reading until it is done, keeping our spare moments during the day for our regular reading? Others would prefer to remain up a half hour later in the evenings for this work. While others still may prefer to forego the pleasure of a few

social evenings for the back work. If some such plans as these were adopted and vigorously followed, how long would there be any back work? "Where there is a will there is a way."

I feel that the last three months of '89 are a critical time with our class. Hundreds of discouraged and faltering members may complete their course in '90 if they will at once determine to make a way to do it. But if we do not soon form our resolution and proceed to carry it out we are likely to fail. Let every member act according to our own class motto, "Redeeming the time," and we are sure to come out winners in the race.

CLASS OF 1891.—"THE OLYMPIANS."

"So run that ye may obtain."

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CLASS FLOWERS—THE LAUREL AND WHITE ROSE.

PRESIDENT DURRELL'S "Chat" will be missed sorely by the '91's this month, but he has promised to resume in December. To take his place the following has been selected from Hamerton's "Intellectual Life." The thought is worth the attention of every student:

"Although the opportunities of rich people are very superior to yours, they are not altogether so superior as they seem. There exists a great equalizing power, the limitation of human energy. A rich man may sit down to an enormous banquet, but he can only make a good use of the little that he is able to digest. So it is with the splendid intellectual banquet that is spread before the rich man's eyes. He can only possess what he has energy to master, and too frequently the manifest impossibility of mastering everything produces a feeling of discouragement that ends in his mastering nothing. A poor student, especially if he lives in an out-of-the-way place where there are no big libraries to bewilder him, may apply his energy with effect in the study of a few authors.

"I used to believe a great deal more in oppor-

tunities and less in application than I do now. Time and health are needed, but with these there are always opportunities. Rich people have a fancy for spending money very uselessly on their culture because it seems to them more valuable when it has been costly; but the truth is, that by the blessing of good and cheap literature, intellectual light has become almost as accessible as daylight. I have a rich friend who travels more and buys more costly things than I do, but he does not really learn more or advance further in the twelve months. If my days are fully occupied, what has he to set against them? only other well-occupied days, no more. If he is getting benefit at St. Petersburg he is missing the benefit I am getting round my house and in it. The sum of the year's benefit seems to be surprisingly alike in both cases. So if you are reading a piece of thoroughly good literature, Baron Rothschild may possibly be as well occupied as you—he is certainly not better occupied. When I open a noble volume I say to myself, 'Now the only Cæsus that I envy is he who is reading a better book than this.'"

CLASS OF 1892.—"THE COLUMBIA."

"Seek and ye shall obtain."

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CLASS FLOWER—CARNATION.

CHAUTAUQUANS will remember the visit Mr. John Fryer and his wife, of Shanghai, China, made them in '88, and will be interested in the following extracts from a recent letter from him:

"Just a year ago I was at Chautauqua, where I joined the Class of 1892 with my wife. Our recollections of that lovely and intellectual summer resort are all of the most happy nature. All that we have to regret is that the work of introducing the Chautauqua element among the Chinese is still a thing for the distant future. Though much has been done, and is still doing, China is very far removed from Chautauqua. There is, however, a spirit of interest and inquiry as to what the course of study is, among the American and English residents. We know also of a few old Chautauquans. We hope before very long to see a circle organized at Shanghai,

with branches at the other ports. With a little more leisure I believe it would not be a difficult matter to induce our personal friends to form a circle at once. Surely the five thousand or more foreign residents in China ought long ago to have had a secretary and to have commenced a flourishing organization.

"The Chinese language seems to represent an impassable barrier to our system being worked among the millions of educated Chinese for the present. There are books enough translated into the language to begin with, but there is no demand for anything outside of practical science. The astute Chinese scholar does not care a straw about the Greeks and Romans or anything not directly bearing on his advancement in wealth or position, hence my efforts have been for nearly thirty years in the direction of supplying the present demand for practical knowledge, hoping that a new generation may not be satisfied without going further and partaking more or less deeply of our Western intellectual and moral culture. I like our Chautauqua plan so much that I expect to be issuing a Chinese Science Course—virtually on our C. L. S. C. plans—soon. I have been preparing for it for years."

CLASS OF 1893.—"THE ATHENIANS."

"Study to be what you wish to seem."

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EMBLEM—THE ACORN.

READING is interesting in proportion to the thought the reader gives it.

QUANTITY of reading does not make a student, but quality.

THAT wonderful English plan of popular education, the University-Extension Scheme, draws in numbers of students who do their work under the most trying circumstances. The last report of the Oxford Branch tells of a student at Camborne who was a miner and left the evening lecture to go in the night-shift underground, and of a weaver at Burnley who in order to have more time to study sacrificed her dinner-hour and remained at her loom reading between the hours of work. There are few 93's who will have more to overcome than these students.

GRADUATE CLASSES.

ARGONAUTS.*

By Mary H. Field.

A YOUTH with a sun-bright face
 Read from an ancient book,
 Whose strength and passion and grace
 Kindled anew in his look,
 As he sat on the cliffs by the sea
 Where the winds blew fresh and free.

It was morn in the tops of the pines,
 Morn on the far off sail,
 And the world's morn in the lines
 Of the mythical wondrous tale
 That stirred the heart of the boy
 Till his own morn sang for joy.

Then a poet, who chanced to pass,
 Looked down with a kindly eye,
 And saw, as though in a glass,
 Himself in his youth gone by,
 And as leans to the flower the pine,
 He bent with a soft incline.

"What readest thou there, my son?"
 In questioning low, he said.
 And the boy, whose heart was won,
 Lifted his gold-brown head
 And smiled, though the smile did seem
 To be part of a pleasant dream.

"I read," he answered at last,
 "The ventures by sea and by land
 As some youths, in a time long past,
 Brave Jason and all his band,
 Their quest of the fleece of gold,
 Which hung in a forest old."

"Tis a tale almost divine,"
 Said the man with the silver hair,
 "Its flavor is like the wine
 We drink in this briny air;
 Happy the youth who reads
 These old heroic deeds!"

"But Oh!" cried the boy, "how tame
 Are these days of toil and trade,
 When no trumpet calls to fame
 And sheathed is each good sword blade;
 No Argonauts ever sail,—
 Our blood is still and pale!"

"Nay, now," the poet said,
 "Let us open again the book;
 Between the lines hast thou read?
 Once more at the story look,—
 Let us seek the treasure hid
 Under this golden lid."

* The following poem was read by Chancellor Vincent at the Recognition Day Services held at Chautauque, N.Y., Aug. 21, 1889, in honor of the Class of 1889—the Argonauts.

"Ah," said the youth, "I know—
 Thou art of those who trace
 A tale of the sun-rise glow
 In these myths of the elder days;
 A dawn lit cloud is the fleece of gold,
 And night is the Dragon fierce and old."

But the seer said, "Read we not
 In this hoary, world-old scroll
 Ever the one great thought
 Of life and the human soul?
 Not to the Hebrew alone
 Were the prophet visions shown.

"Ever were words for the ear
 Of the childhood of the race,
 Ever the light shone clear
 On each uplifted face,
 And the spirit breathed on him,
 Who groped in that dawning dim.

"The bards of Hellas had found
 In the heart of every youth
 A Prince, from his birth discrowned
 Of his heritage of truth,
 Dwelling, like Jason young,
 In a cave with darkness hung.

"And must he learn as he can
 The lessons of Chiron old,
 The master, half-beast, half man,
 Body and soul must unfold;
 Narrow the wisdom and small
 Which counteth not each in all.

"How deep is the myth and grave!
 Hail to the teacher good
 Who taught in that ancient cave,
 Hid in the far green wood!
 Be strong! Be true! Be bold!
 Were the lessons of Chiron old.

"But forth must the young soul fare,
 Whether for good or ill,
 Following its destiny's star
 Afar over vale and hill;
 Tempests' and torrents' wrath
 Must thunder across his path.

"Ah, happy is he indeed,
 Who can set his face to the storm,
 Who is brave in time of need,
 Yet with heart like Jason's, warm,
 Still lendeth his fresh young power
 To the helpless in danger's hour.

"Who doth heavenly aid invoke,
 And who lists to the voice divine,
 As Jason heeded the oak
 At old Dodona's shrine,
 Harms not the rock or the tide,
 Whom the Oracle doth guide.

"For him shall the tempest cease ;
He shall ever victor be,
He shall keep with the gods at peace,
Who the powers of ill shall flee,
And the cloud which blackest seems
Shall be lit with silvery gleams.

"Still do the Argonauts sail
Over the tossing seas,
Still their cheeks turn pale
At the Symplegades,
Still lives the dragon old
Guarding the fleece of gold."

Then the youth arose and stood
With his face turned to the morn ;
"True are thy words and good,
And the tale is heaven-born."
He cried, "And I—I, too,
These glorious deeds will do !"

"Farewell," they said, "farewell !"
And the seer turned to the west
Whence a voice, like an echo, fell
From the Islands of the Blest,—
"Soon, soon, through the surest peace,
Thou shalt sail for thy golden fleece."

A NUMBER of enthusiastic meetings of the Class of '83 were held the past season at Chautauqua, and much interest in C. L. S. C. work was shown by all present. It has long been felt that a class home was necessary, and steps have been taken to secure one. The Class of '83 has united with the Class of '85 in the purchase of a building, which now has to be paid for, to be repaired, furnished, and adorned. An earnest

appeal is made to each loyal '83 to furnish money or decorations. Do not refuse to give because your offering must be a small one, but give according to your ability. Send all sums of money or promises of decorations to the treasurer, Miss A. C. Hitchcock, Burton, O.

It is the special work of the League of the Round Table to enlarge the interest in the C. L. S. C. wherever and in whatever way practicable. All members of the League are earnestly requested to contribute short articles concerning the C. L. S. C., or any item of interest connected with the work, to local papers. Should any member wish for information or have plans to suggest, address the secretary, Eunice E. Tuttle, Busti, Chautauqua County, N. Y.

THE city address of the president of the Class of '83, Miss Annie H. Gardner, was given incorrectly in the October issue of *THE CHAUTAUQUAN*. It should read 22 St. Charles St., Boston, Mass.

THREE beautiful new banners appeared in the Recognition Day procession at Chautauqua last summer. They headed respectively the ranks of the Guild of the Seven Seals, the League of the Round Table, and the Order of the White Seal. To Mrs. J. C. Martin, of Philadelphia, an enthusiastic Pioneer, the orders are indebted for their new standards.

MEMBERS of the Class of '87 are requested to send their names and addresses to Miss Cornelia A. Teal, 848 Gates Ave., Brooklyn, N. Y., in the interest of the Class Building.

THE treasurer of the Class of '89 is Mr. O. M. Allen, 824 Main St., Buffalo, N. Y.

LOCAL CIRCLES.

C. L. S. C. MOTTOES.

"We Study the Word and the Works of God."

"Let us Keep our Heavenly Father in the Midst."

"Never be Discouraged."

C. L. S. C. MEMORIAL DAYS.

OPENING DAY—October 1.

BRYANT DAY—November 3.

ROMULUS DAY—November 18.

SPECIAL SUNDAY—November, second Sunday.

MILTON DAY—December 9.

BRUTUS DAY—December 17.

COLLEGE DAY—January, last Thursday.

SPECIAL SUNDAY—February, second Sunday.

LONGFELLOW DAY—February 27.

SHAKESPEARE DAY—April 23.

ADDISON DAY—May 1.

SPECIAL SUNDAY—May, second Sunday.

SPECIAL SUNDAY—July, second Sunday.

INAUGURATION DAY—August, first Saturday after first

Tuesday; anniversary of C. L. S. C. at Chautauqua.

ST. PAUL'S DAY—August, second Saturday after first Tuesday; anniversary of the dedication of St. Paul's Grove at Chautauqua.

RECOGNITION DAY—August, third Wednesday after the first Tuesday.

"I WISH heads for circle leaders were to be bought," writes a despairing correspondent who feels with all her circle-mates that there is not one of them fit to lead a circle, however excellent members they may be. The exclamation will meet with sympathy, for a head for leading

is not a common one, as many a circle has found to its sorrow.

Yet if a certain few qualities are given, one cannot fail of being a good leader. They are within the reach of any person who is willing to put himself through a course of self-

examination and self-cultivation. That they are not oftener embodied is because neither circle nor leader clearly recognizes what they are.

If the Scribe be asked to tabulate them he would put first, belief in the aim of the circle; not mere passive consent that it is a good thing, and probably will do good, but a positive conviction of its beneficent influences which will inspire his mind to enthusiasm, touch his imagination, and make him an ardent advocate of its benefits. A leader with such a mental attitude toward his work carries others with him in spite of themselves. Nothing is more contagious than sincere belief. Out of this belief a characteristic essential to leadership naturally comes, willingness to work; to work at home over the readings until he is full of them, familiar with all the points, the dates, the views, and prepared to give information, correct, and suggest; to work among the members, inciting them to closer reading, and suggesting methods of preparation; to work in the circle, planning and executing.

It is a pity that the zeal and labor of the "born leader" should ever be soured by discouragement or acrimony, but pity 'tis, 'tis true. In the Scribe's opinion a little less willingness is better than a little less cheerfulness. A circle loves a cheerful worker. It will do anything for him. It will forgive him for mixing his metaphors or bringing a king into the world twenty or one hundred years too early, for getting it into debt or harnessing a blunder on it, quicker than it will forgive him for undertaking something and losing heart, for carrying a moody face when interest fails, or giving tart replies when his plans are vetoed. To enjoy the work, the hard and easy, the success and failure, and so be cheerful always, is a characteristic which will carry a leader, weak in all other respects, further than any other quality.

Tact, the fine art of giving the right touch to one's doings—of putting the proper emphasis in the proper place—is the most essential quality after a cheerful, willing, and enthusiastic spirit. There is a way of approaching people which antagonizes them. Tact never antagonizes. At the first sign of a ruffle on that subtle and variable thing the temper of a circle, it throws a soothing influence. It knows that a plan can be carried better by securing co-operation and approval beforehand than by any attempt at dogmatic compulsion. It always says what do you *think* of doing this? Not, we *must* do this. If one member detests quizzing it never irritates him by quizzing. It proposes, but never insists. It leads where it can, but it knows how to follow.

A certain amount of ingenuity is an addition

to a leader's fitness. There is always a danger that a method adopted will grow tiresome, that members will lose spring under its workings, and to avoid this an occasional digression, a special exercise, a surprise in the way of a new map, picture, or visitor, will arouse interest and interrupt growing dullness, and this a wise leader provides for. To prevent loss of interest is far easier than to restore it when gone. But he well knows that too much digression is the bane of solid work and takes care that there is no more of it than is necessary to keep up zeal, and never so much that the regular duties are interfered with. The ingenious leader, too, will have insight into special needs, tastes, and ability. He will not attempt to lighten the work of a circle with a scientific bias, with a Greek symposium, but he will hunt up somebody to give a microscopic exhibition or a talk on geology or to perform a few experiments. To a socially inclined circle, he will propose a reception, but to those who care little for the social side of life, a lecture, an excursion, or a formal program.

It is these qualities which make the wise leader. That he should be well read, a college graduate, of good social position, of influence, is far less essential. If he is all these latter things, so much the better, but of far greater importance are his spirit, his tact, and his ingenuity.

THE hektograph is a useful contrivance for taking several copies of any written document. In circles it is so convenient for printing programs and circulars that we print here directions for preparing one, with ink.

Take 2 oz. of gelatine (Cooper's preferred) and 12½ fluid oz. of glycerine. Soak the gelatine over night and drain well. Put the glycerine into a small pail or any suitable vessel and set it into another and larger dish which has been partly filled with salt water. By heating the salt water to the boiling point, the glycerine may be raised to a temperature of 200°; when this temperature is obtained, add the gelatine to the glycerine, and heat the mixture for several hours to drive off the water. Now pour the fluid into a shallow pan and allow it to cool for at least twelve hours. (A shallow oblong tin pan 8 by 10 inches in size and one inch in depth may be made by the tinner; an ordinary oblong pie pan will answer the purpose, or even a thin board with laths nailed around the edge.)

The ink for use on the hektograph is made by putting ¼ oz. 3 B. purple aniline in 1 fluid oz. of hot water. On cooling add ¼ oz. each of alcohol and glycerine.

To use the pad, write with an ordinary pen, on

a sheet of paper whatever you wish to print, using the above ink. Allow the ink to dry on the paper of its own accord, without the use of the blotting paper. When dry lay the paper, the written side down, on the pad, pressing it down lightly and smoothly. Now by taking the corner of the paper between the thumb and finger, it may be carefully removed leaving the impression from which the printing is to be done on the pad. To print, simply lay the paper evenly on the impression on the pad and press the surface very lightly. Thirty or forty impressions can be made before it will be necessary to write the copy over. As soon as the printing is done, wash the pad with a sponge or cloth, using lukewarm water, until all the ink is removed. The ink should not be allowed to stand on the pad. If the surface of the pad becomes uneven, the composition may be melted and poured back. New material may be added at any time.

THE Pacific Coast Branch of the Chautauqua Literary and Scientific Circle is out with an attractive circular explaining its aims and methods. The Pacific Coast Branch is in every sense auxiliary to the National organization. All names and fees are forwarded promptly by the Pacific Coast Secretary to the Central Office at Plainfield, N. J. Membership there is precisely equivalent to membership East and all Pacific Coast Chautauquans are advised to affiliate with the Branch. The reason for having an auxiliary is the distance which separates the Coast from Plainfield, and the consequent delay in receiving answers to correspondence and supplies of every sort. It is manifestly better to have a nearer source of supply. Added to this is the necessity of a home office, where the needs of the Coast will be better understood, and where the whole work will receive constant and earnest supervision. The secretary cheerfully responds to any call for her personal assistance in organizing circles. The president also and other members of the executive committee are happy as far as possible to visit circles and aid them with lectures and inspiring talks upon Chautauqua themes. The Branch has been at work for ten years adding to its membership, becoming more and more widely known and honored, and holding its annual summer assemblies with ever increasing success. Its members now number thousands and it takes rank among the educational powers of the Coast. In every state and territory there is a large membership. Almost every large town has its local circle, and in many a little neighborhood, not aspiring to even village honors, a few kindred spirits

gather weekly or fortnightly and do the Chautauqua work.

The Illustrated Pacific States in its literary edition, published on the first Saturday of each month, in San Francisco, has generously given to the Pacific Coast Chautauquans a page each month to be devoted to the interests of the C. L. S. C. This department has been edited by the Chautauqua secretary, Mrs. Field, and will continue to be in her charge. All circles are invited to report through this medium, and Chautauquans generally are urged to subscribe and to contribute. Much of the credit for the healthy condition of the Chautauqua work on the Pacific Coast is due to Mrs. Mary H. Field, the secretary.

THERE are a number of Unions entering this fall on their first year of full work. To them we commend the following report from the Brooklyn Assembly. It is a record of honorable achievement and shows what a Union well-officered and energetic may accomplish. While few may be able to carry out entirely so full a program all may aim to do much that is here outlined.

The Brooklyn Chautauqua Assembly held its annual meeting on June 8, at Brooklyn Institute; the following officers were elected: president, Ernest P. Brook; vice-president, N. Horace Gillette; secretary, Miss Cornelia A. Teal; assistant secretary, Miss Fanny Bunce; treasurer, William F. Brown. The president and secretary were re-elected. The secretary, Miss Teal, is the author of "Counting the Cost; or, a Summer at Chautauqua," recently published. A Missionary Committee was appointed to awaken dormant circles, organize new ones, place Chautauqua literature in the public libraries, and generally extend the cause. A Visitation Committee was authorized also, one from each local circle, to visit every circle in the city and encourage each other by word and work and become acquainted with the manner of work in the various circles. It was also suggested that reports be had at each bi-monthly meeting of the Assembly from all circles as to the state of each and the new features.

The organization closed with a surplus in the treasury, after having had one annual sermon, the first city Union to establish such a custom; a Recognition Service (also the first of a city Union) at which twelve hundred persons were present; seven lectures on the C. L. S. C. studies; three Vesper Services at which, respectively, the Chancellor made an address on "The Out-of-School Multitudes"; sermon by the Rev. R. H. Bosworth, Class of '89; and an address by

Lyman Abbott, D. D. The Assembly started the official year with fifteen circles, and now has twenty-three in good condition.

At Berlin, Wisconsin, the Class of '83 has an Alumni Association which in August last held its *seventh* annual reunion. This fact alone would commend the Berlin Chautauquans, but the character of the program with which they celebrated does so still more. It shows that the association has not only kept together but it has kept up serious work. We print the program in full and invite the attention of new circles unaccustomed to arranging programs to its features. The quotations which accompany the numbers of literary exercises always add to the interest of a program. Giving a topic for conversation and quotations with each course of the *menu* is another pleasant and useful feature.

MUSICALE.

Roll-Call.

Answered by Musical Quotations.

"Let me make the songs, and I care not who makes the laws."

Secretary's Annual Report. President's Address to the Club. Transaction of Business.

Handel.

"Music is the key-note of nature."

Life, by Mrs. Mary J. Jenkins.
Operas and Oratorios, Miss Jennie Christie.
His Characteristics, Mrs. Adelaide Bellis.

Conversation.

"The commonest fare possesses a treasure
Of pleasant thoughts, fragrant as fairy tales."

MENU.

FIRST COURSE.

Fish. Topic. Aquatic Food.
"Find poetry in prose, for it is always to be found there."
"It has always seemed absurd to be so careful about what we put into our mouths, and to leave to chance to arrange what comes out of them."

SECOND COURSE.

Tongue. Topic. Animal Food.
"Twilight brought back the evening star
To the sky, and the herds to the homestead."
"Because things are common, most men forget to pay them praise."

THIRD COURSE.

Fowl. Topic. Feathery Tribes.
"Hark to Nature's lesson, given
By the blessed birds of Heaven!
Every bush and tufted tree
Warbles sweet philosophy."
"The world of fishes is the world of silence,
The world of birds is the world of light and song."

FOURTH COURSE.

Salad. Topic. Vegetables in General.
"Back to the world he'd turn his weary soul,
And dip his fingers in the salad bowl."
"I know a bank whereon the wild thyme blows."

FIFTH COURSE.

Ices. Topic. Dessert Compositions.
"Yes, let's be merry! we'll have tea and toast,
Ices for supper, and endless host
Of sandwiches and jellies, and mince pies,
And other such ladylike luxuries."

SIXTH COURSE.

Fruits, Coffee, and Tea. Topic. Poetry of Each.
"Coffee which makes the politician wise,
And see through things with his half-shut eyes."
"Serenely full, the epicure would say,
Fate cannot harm me, I have dined to day."

AN interesting adaptation of the Chautauqua Literary and Scientific Circle has been made in Independence, Iowa, by the Rev. F. N. Riale, pastor of the First Presbyterian Church. Mr. Riale has in his church a branch of the Christian Endeavor Society, which last year attempted to supply the intellectual demands of the organization by a series of evening studies with authors, such as a Longfellow night, an evening with Emerson, and the like. The results, in general, he says, were far from satisfactory. The work seemed to lack unity and continuity. Besides, it was practically but a repetition of what was being already well done in the public schools. These two facts alone would naturally tend to make it both uninteresting and unprofitable. For the coming year Mr. Riale has proposed a new plan. It met with a hearty reception from the friends to whom he presented it and he was persuaded to write an article to *The Interior*, of Chicago, explaining it. From this article we clip enough to show the scheme. For those who cannot take the entire course it seems to us an admirable arrangement:

The aim of the work may be expressed in the words of Canon Farrar: "Let us not desire to know merely that we may know, for that is sheer curiosity; neither let us desire to know simply that we may be known, for that is nothing but vanity; never let us seek to know only that we may sell our knowledge, for that is the basest covetousness; but let us ever strive to know that we may edify ourselves and those about us, for this is heavenly prudence." The scope of the work is limited to the Chautauqua studies in Roman history and the Sunday readings selected by that course for the coming year. In addition thereto there will be given, from time to time, lectures and talks on subjects pertaining to the work. THE CHAUTAUQUAN and the text-book on Roman history will be used as a basis for the work. The work is thus limited that a larger number may find time to engage in it, and also that those in school may find the same a help to and not a mere repetition of their other studies and work.

The advantages derived from the study of

Roman history will be apparent to all. Young men certainly can find no more beneficial and attractive line of reading, for it is from Rome that we gain the laws and spirit of our own free institutions. There is no one thing that will better fit one for intelligent American citizenship than a study of that nation which first led the world to appreciate the true value of liberty. Such a study will be equally valuable to young ladies; for in Roman history is marvelously exhibited the rise of woman to her rightful place in society. Besides, its history for centuries records the world's advancement in literature and fine arts, both so essential to the development of true womanhood.

The study of the Roman people is as valuable to the Bible student as to the merely secular historian. It seems to be absolutely necessary to the full appreciation of the New Testament and the history of the Christian church. The Gospel of Mark, in many respects the most valuable of the four, was written for the Romans, and has the spirit of that people running through it. Paul's longest and most profound and important letter was written to the Romans, and no one can begin to appreciate or comprehend it who does not understand the habits of mind and tendency of thought of that people, which then were the masters of the Western world. Then, too, the early history of the church, in its rise and growth, can be but little understood by one who is unfamiliar with the nation in which it had its first three centuries of phenomenal progress.

The other part of the required work will be the Sunday readings in *THE CHAUTAUQUAN*. These are gleanings from the classics of Christian literature, and no one can read them without being thrilled with nobler aims and stronger purposes for Christian life. These two main lines of work, together with the additional matter pertaining thereto, cannot fail to impress one with the importance as well as the pleasure of the work herewith proposed.

The work is laid out primarily for the members of the Young People's Society of Christian Endeavor, but it is expected that others will enter upon it. It is hoped that many of the older members of the church will avail themselves of the course of study, both for their own personal benefit and to give help and encouragement to the younger members of the home. It is also hoped that many of the teachers of the schools, as well as others who may desire, will unite with the young people in the work. The aim is to have it as broad in its sympathies as is the Young People's Society of Christian Endeavor of which it is a part. There is none, however limited his previous literary advantages have

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been, but can enter the course and receive benefit therefrom.

The outline of the work will be very simple. Each is to "fill in" as his own time and ability will permit. Some will doubtless gain scarcely more than a surface view of the subjects; while others will have gone deeper, and thus gained more. But every one can do something and receive some benefit. The class will meet on the first and third Friday evenings of each month. The first part of the evenings will be devoted to questionings and discussion on the work. Afterward the time will be spent in social enjoyment. The meeting will be conducted by a leader, similar to the general plan of the Chautauqua circles.

The cost to any one member need not exceed \$2.70—the price of *THE CHAUTAUQUAN* and the text-book on Roman history. This can be greatly reduced by persons uniting in clubs. The time required for the study need not exceed twenty minutes a day. Those who desire further research, may do so as time permits.

The requirements made of all those who enter the course, are as follows: (1) To make the aim of the study as the one indicated in Canon Farrar's words given above. (2) To spend at least twenty minutes a day, or two hours a week, in the study of the course laid out. (3) To attend each of the meetings, unless unavoidably prevented. These requirements are not made to drive any to the work, but simply to give strength and purpose to the undertaking.

NEWS FROM THE CIRCLES.

CHINA.—A graduate of '83 writes from Ningpo: "We have found the Chautauqua studies very helpful in our missionary work, as they furnish lines of thought different from the absorbing ones connected with our regular duties. It is our belief that every missionary should have such independent literary work for mental diversion and stimulus." The writer is pursuing a post-graduate course.

SOUTH AFRICA.—The secretary of the circle at Wellington writes: "Our last local circle gathering at Wellington in August, was a social occasion. There was a Round Table at one side of the hall, that lasted a considerable portion of the evening. It was composed of school-boys to whom a friend and I talked of the C. Y. F. R. U. A more interested group one seldom sees. We took the names of about twenty boys who would consider the matter of joining. Oh! if we could only get the books! We have had calls from several of the boys since then with inquiries as to when the books would be here. The matter of getting books is a perplexing one; we get

them by sailing vessels to save expense. It has happened in our South African experience that it took longer to get things from Table Bay to Wellington than for them to cross the ocean, though they had a voyage of about ninety days. One who has never learned patience in waiting before, must learn it in this land. 'To-morrow is also a day,' is a byword that people live by here to a remarkable degree. It is my desire to make a start for the C. L. S. C. at the Gold Fields of the Transvaal. A short time ago I received a letter from a gentleman at Rlerksdorp, in that region, making inquiries about our work. He had seen in the Cape *Argus* the report of the Assembly and he thought it would be a good thing for them if they could have a Chautauqua circle there. He says almost no books of any sort are to be had at Rlerksdorp as there is no bookseller's shop in the place. I have other encouraging letters from Natal, one of which is from Hilton College."

CANADA.—The following letter, which will doubtless be productive of good results, was sent, in September, to friends of the members of the circle in Paris, Ontario:

We take the liberty of hereby calling your attention to the claims of the Chautauqua Literary and Scientific Circle as a means of self-culture. As you are doubtless aware, the Chautauqua idea has developed into a magnificent fact, and has become the grandest means of self-culture ever yet devised, and its benefits are now being participated in by over a hundred thousand people, and to these tens of thousands are being added every year. It is safe to say that "The People's University" now exercises an influence unsurpassed by any other self-educative force in America. The courses of reading are so well selected as to benefit the best educated, while at the same time they are adapted to the comprehension of those whose educational advantages have been of a very limited character. Consequently, among the enthusiastic C. L. S. C. students are many gray-haired professors, grave doctors of divinity, eminent scientists, and prominent statesmen, though the vast bulk of readers consists of busy artisans and merchants and housewives. The time required to do the reading is from half an hour to an hour a day for nine months in the year. At the end of a four years' course a diploma is given. Although these courses were primarily intended for home reading, yet it was found that the benefits derived therefrom were very much enhanced if a number of readers formed themselves into a circle, for the purpose of meeting at stated intervals to discuss the readings and to secure an interchange of ideas thereon.

Last year a small circle was formed in Paris, which met regularly every week, and the members of which thoroughly enjoyed the meetings, which proved most profitable as well as exceedingly interesting. It was thought desirable this year to increase, if possible, the size of the circle, and we therefore take the liberty of in this way laying the claims and benefits of the C. L. S. C. before a number of the more intellectually inclined people of Paris. Would you not like to unite with us? We think that if you will do so you will feel at the end of the season, as we felt at the close of last season, that you could not have chosen any more delightful way of spending a few minutes of each day and one evening of each week.

There will be a meeting held on Friday evening, the 20th, at eight o'clock, at which fuller details of the movement will be given and the subject discussed. The ministers of the town are all in hearty sympathy with the C. L. S. C., and a number of them have promised to be present on that evening to deliver short addresses. They have also promised to assist the circle during the winter by giving occasional popular lectures on subjects bearing on the course of reading.

You and any friends you may wish to invite, are cordially requested to be present on the evening above mentioned. Your presence does not to the slightest extent obligate you to join, but at any rate it will encourage us to have you countenance our efforts. Kindly make a point of attending and bring with you any friends whom you think might be interested in the circle.

Hoping your earnest and favorable consideration will be given to this matter, we are yours sincerely,
PARIS C. L. S. C.

—The Calvary Church Circle of Montreal begins with bright prospects. —The Mississippi Branch organized in Carleton Place, Ontario, in September.

MAINE.—Seven '90's and four '91's form the circle at South Union.

VERMONT.—The two circles of Bradford, the Athene and the Socratic, celebrated the close of a successful year's work in August by a picnic and banquet. The Athene is composed wholly of young people belonging to the Class of '92; the Socratic numbers among its eighteen members sixteen post-graduates.

MASSACHUSETTS.—The new circle in Florence organized with twelve members.

CONNECTICUT.—The circle at Waterbury began the year with a Sunday Vesper Service in the parlors of the Young Men's Christian Association. A general invitation was given through

the local paper, and a large attendance resulted. The aims and advantages of the C. L. S. C. were presented and many new members decided to begin the course of study.—Circles at Terryville and West Suffield are beginning their second year.

NEW YORK.—The prosperous Aleph Circle of Jamestown called a meeting in September to elect officers and arrange for a prompt beginning of work on Opening Day. The interest manifested was very gratifying to those who have upheld the circle in years past.—The Chautauqua Union of New York City began the year in a novel manner. A large steamboat was chartered September 7, and the members of the Union and their friends left the hot and dusty city for a moonlight sail up the Hudson River. Over fourteen hundred persons were on board. Music and refreshments added to the enjoyment of the occasion, and one and all were unanimous in praising the management of the Union and predicting a phenomenal success for the C. L. S. C. in New York City. Among the New York circles represented were the Laurel, West Harlem, Emerson, Garfield, Endeavor, Irving, Mistletoe, Home, Arden, Park Avenue, and Gouverneur. Members representing Brooklyn circles were present from the Brooklyn, Clinton, Eos, Gleaners, Hyperion, Janes, No Name, Oak Leaf, Ocean Hill, Pierian, and Ad Astra.—Gouverneur has two flourishing circles.—The circle at Olean retains its graduates some of whom are taking the course in English history and literature.—Fourteen '88's of Brooklyn have formed a graduate circle named in honor of their president, A. E. Dunning. One of the members has a diploma with fifteen seals. Another circle of Brooklyn graduates from other classes has organized. A new circle of the same city, formed mostly of '93's, is the Adriel; its motto is, "The palm is not gained without the dust of labor."

NEW JERSEY.—The three circles of Plainfield have reorganized.

PENNSYLVANIA.—Five new names are sent from East Bangor and a large class is hoped for.—A circle in Ligonier is of recent organization.

—The students in Scotland show themselves thoroughly in earnest. Beginning as late as February, they were obliged to study through the summer vacation, and have now completed the year's work. Desiring a larger circle for the current year they held a public meeting in September and invited their friends to enjoy a program in which a plea for the C. L. S. C. occupied a prominent place. We shall expect a report of the developments.—Quaker City Circle of Frankford celebrated in June the close

of four years of work and the completion of the course by all its members, by giving a lawn party to which sixty guests were invited. The program included music, readings, charades, and a history of the circle. The Quaker City has no idea of disbanding, but will now begin on post-graduate courses.

DELAWARE.—A new circle is reported at Farmington.

MARYLAND.—The circle at Brooklyn Postoffice makes a good beginning,—twelve members at the first meeting.

WEST VIRGINIA.—Six at first and more coming, is the report from Ceredo.

TEXAS.—The plan to be adopted in Dallas this year is to observe the Memorial Days by open meetings with appropriate programs. The other evenings are to be devoted to recitations.

OHIO.—The first annual reunion and reception of the Winton Place Circle of Cincinnati was held in Town Hall at the close of the study year. Refreshments were served and the social features were delightful.—The Eupatrids of Hamilton send the following report of a Greek Symposium given by them in July: "One week preceding the entertainment we sent to forty of our friends invitations neatly written on scrolls of yellow paper tied with purple ribbon. The spacious house whose hospitality we accepted was made as Greek as possible. All modern furnishings were removed and their places occupied by couches on which the guests reclined. Greek pictures, statues, urns, and draperies adorned the rooms. A harpist was present and sweet strains of music filled the pauses in conversation. When all the guests had arrived, the symposiarch was chosen, the Eupatrid president being the one selected. He took his place beside the flaming altar of sacrifice, and announced the character of the feast and the entertainment, after which two slaves entered and crowned each guest with a wreath of laurel. The symposiarch was then presented with a large goblet of wine (lemonade) from which he sipped and passed it to his neighbor who did the same, and so on around the circle. The supper was served in two courses, consisting of cucumbers, radishes, salads, dates, figs, olives, ices, and cakes. Preceding each course, and at the conclusion of the supper, two slaves bearing dishes of perfumed water passed around the circle and sprinkled the hands of each one, drying them on linen towels. Between the two courses a libation was offered to Pallas Athene. At the conclusion of the supper the following program was rendered:

Tableau—Hector and Andromache.

Tableau—Greek lady at her toilet.

Recitation—Sappho.

Tableau—Pericles and Aspasia.

Recitation and Tableau—Nydia.

Conversation between Socrates, Glaucus, and Critobulus."

INDIANA.—The circle at Jonesborough has two ambitions,—to increase its numbers and to do all work thoroughly. Its two years' record is an excellent one; since organization no meeting has been omitted; meetings have been held weekly and sometimes semi-weekly; nine sessions for review were held in the summer vacation.—The Cary of Auburn reorganized with eighteen members, all of whom take the twelve-page memoranda.

ILLINOIS.—The circle at Fort Sheridan, new last year, announces itself as ready for work.—The Perennial Circle of Fairbury held a pleasant meeting in June in a picnic grove. The afternoon was spent in fishing, croquet, and other recreations, and after supper the circle gathered around a Camp-Fire to enjoy a program of readings, recitations, short speeches, songs, and a history of the year. The adjournment was until October 1.—Graduates, under-graduates, new recruits, and local members form the Hawthorne of Monticello.—Thirty-one is the membership in Effingham.

KENTUCKY.—Twelve students in Richmond have begun the three years' course for graduates in English history and literature.—A circular sent by a member in Missouri to a friend in Louisville has resulted in the founding of a circle in that city, of which the secretary writes: "We are all young, hopeful, and enthusiastic and expect to send excellent reports of our progress during the year. We begin immediately and shall meet each week."

TENNESSEE.—Every member of Carthage Circle promised at the closing meeting in August to continue the course this year. The local paper in chronicling the fact, adds: "The advantages of home culture among the older people, and especially parents, can scarcely be over-estimated. If parents would have some aspirations in that direction, how easy and natural it would be for their children to have their ambition aroused. This once done, there is little danger of their remaining in ignorance. More culture in the home is what we need to insure to the next generation a high order of intelligence."—The Spartans of Morristown have diminished in numbers since organization but not in zeal. The remaining three intend to graduate together in '92.

MICHIGAN.—Norvell Alpha Beta reorganized with all of its last year's members and one new one.—Republic Circle retains all of its

former students.—The sixteen people who expect to graduate in Lee Circle of Hastings next June are planning for a three weeks' sojourn at Bay View Assembly.

WISCONSIN.—Granite Circle has reorganized in Berlin with several new names on its roll.

MINNESOTA.—Twenty-one have joined the Thirteenth Ave. Circle of Minneapolis.

IOWA.—Garden Grove has a flourishing class of fourteen.—The Prospect Park of Des Moines organized with twenty students.—

The alumni of Leon and Hopkinton are pursuing seal courses.—Fifteen new names are sent from Allerton.

MISSOURI.—A member of the circle at Mexico returned from the Warrensburg Assembly with such an amount of enthusiasm that it induced her to ask for two hundred C. L. S. C. circulars for distribution. She expects to be able to report an enlargement of the old circle and the formation of a new one.—A splendid increase is reported from Louisiana,—twelve last year, twenty-seven now.

COLORADO.—Montrose Circle is composed of busy people who could with difficulty find time for the necessary study. Yet all the meetings but three were held last year, and every one is ready to begin this year with renewed courage.—The twelve members in Durango are working enthusiastically.

KANSAS.—The Grecians of Parsons reorganized with full membership. The nine graduates will remain with the circle.

NEBRASKA.—All are ready for work in the circle at Sidney.—Weekly meetings are held in Oakdale.—The circle at Long Pine began promptly this year.

NORTH DAKOTA.—"A larger circle and increased zeal" are promised in St. Thomas.

SOUTH DAKOTA.—Brookings Circle has begun its second year.—A new circle enrolling seven is a Frankfort organization.

CALIFORNIA.—The circles of Sacramento spent a day together in the summer at Oak Grove, eight miles from the city. Committees were provided to see to the lunch, to arrange the program, and to suggest the amusements. There were contests in bean-bag throwing, a chicken hunt, and an egg race, in all of which prizes were given. One person wrote a history of the day, leaving blank spaces for adjectives to be supplied by the others who did not know what nouns the adjectives were to modify. Some original verses on "Bangs" added to the merriment. A choice musical and literary program followed the supper, and the delightful drive home closed what the participants called a model picnic.—Among the pleasant social features of Ramona

Circle of Los Angeles last year was a Washington party, at which several distinguished persons gave most interesting personal reminiscences and the heiress of Arlington Heights played a stately minuet on the harpsichord. Martha Washington described the inauguration ceremonies of 1789, Robert Morris explained the Federal Constitution, Mrs. Dinwiddie told about the old stage-coach, and the program was filled with much else that was instructive and entertaining. The Ramona expects to do this year's work with increased enthusiasm.

SOUTH AFRICA ASSEMBLY.

The secretary of the South African Branch of the C. L. S. C. sends the following report of the first Assembly held in that part of the world:

"We began our Assembly on the evening of June 28 with an address from the president, the Rev. Mr. Ferguson, followed by the reading of a lecture on Ruskin, delivered at Chautauqua last year. On Saturday a. m. the day began with devotional exercises, followed by a report of the secretary upon the work of the four and a half years of Chautauqua in South Africa. Miss Ferguson, principal of the Huguenot Seminary, gave an address upon mission work in South Africa, as she had seen it during her year of travel through the land. In the afternoon we had our Recognition Service. We were sorry that only three of our class could be present, but we were glad that five others were ready for their diplomas and would be with us in spirit that day. I had sent their diplomas to three whom I knew had finished the course, so that they could receive them on that day. The four others in our class of twelve I expect will complete their reading within the next few months. Our Recognition Service began with a responsive reading in the small hall of the Seminary, only Chautauqua members being present. It was a small procession that marched over to Goodnow Hall, passing under an arch of bamboos adorned with golden oxalis blossoms, but we do not despise the day of small things, and we felt we were one with a great host scattered over the world. In Goodnow Hall had been put up the class name of Argonauts, the letters made of oxeye daisies and resting upon a background of feathery green. After another responsive reading the president made a short address to the class and presented the diplomas. An essay had been read by one of our number, giving an account of the course we had been through, described under the figure of the Argonauts, and explaining in that light the words of the class motto. On Saturday evening the program consisted of a paper upon the origin and growth of Chautauqua, and a Round Table at which several

pieces of vocal and instrumental music were interspersed. On Sunday a. m. people were left to attend the Dutch or English church as they might prefer. At three in the afternoon Mr. Ferguson conducted a most interesting Bible reading, and at five we had the Vesper Service just as 'day was dying in the west.' In the evening we had a sermon from the Rev. A. Murray. We concluded not to have a session on Monday morning. The sessions had been of much interest to those present, but it was a great disappointment to have so small an Assembly. I tried to comfort myself by thinking that was more than could be brought together for a good lecture in Cape Town. It takes a long time to get anything started in South Africa. It was suggested at the Round Table that perhaps the Cape government might take up Chautauqua as an educational work and give a grant for a secretary's salary. I had not before thought of such a possibility. I shall certainly try to lay the matter before our Superintendent-general, who has already shown much interest in Chautauqua ideas."

PIASA BLUFFS ASSEMBLY, ILLINOIS.

The Piasa Bluffs Assembly is located in one of the openings of the Mississippi bluffs on the Illinois side, thirty-seven miles above St. Louis. The last session opened August 6 and closed August 27.

Two separate departments of instruction were carried on daily, the Sunday-school Normal work and the C. L. S. C. work. The former was in the hands of the Rev. J. C. W. Coxé, and the latter in care of the Rev. Frank Lenig, A.M.

Recognition Day was August 22. It was a success in every way, though the first ever held at Piasa Bluffs. The Golden Gate and Arches representing history, science, literature, and art were erected with becoming formality. About twenty Chautauquans took part in the procession. Appropriate recognition addresses were made by the Rev. Mr. Hobbs, Dr. Fry, and Dr. Coxé, the latter presenting the diplomas to the graduates. A prize examination was held on the books of last year after the services. The first prize, consisting of a full set of books for next year, was won by the Rev. Frank Lenig, the second prize was won by Mrs. Mary E. Terry, a garnet set for the present year, the third prize, a map of the travels of St. Paul, was carried off by Mr. J. A. Fields. Toward evening the Chautauquans sat down to supper prepared for them, and later the day's services were closed with a Camp-Fire. The first Recognition Day of Piasa Bluffs Assembly will be long remembered by those present. The Assembly closed with a grand music day.

THE LIBRARY TABLE.

AS we are inviting the readers of THE CHAUTAUQUAN to *The Library Table* for the first time, a word of explanation may be necessary. It is designed to gather here each month in an informal manner the best expressions of opinion, the finest thought, and brightest description on a variety of topics, political, literary, scientific, and historical. The whole library, from the weightiest volumes to the daily papers, will be called upon to contribute. A thread of explanation will gather these selections into a whole. In preparing the department we shall aim at two ends,—to select subjects which will be of present interest and permanent benefit and give such views on them as will be stimulating to the thought and conversation of those who shall gather about *The Library Table*. To those persons who have not access to libraries or who have little time for reading on subjects, we are convinced that such a classified arrangement of selected matter will be of value and interest.

THE SURPLUS OF THE GOVERNMENT.

Each year finds congressional representatives and senators, the press and the people, wrangling over the "surplus." "What can be done with it?" "What can be done without it?" "What is the use for it?" are the questions.

The "surplus," some argue, threatens a panic; others argue it is the sign of great prosperity. Though the debates have been going on since 1876 the surplus has not been argued out of existence. It still exists, and in the coming session of Congress will be as prominent a feature as it has been in the past.

This surplus is not difficult to understand if one looks into the Government accounts. It is simply the amount of money the Government has on hand each year after paying its debts. Let us take the year ending June 30, 1888, as that is the last for which the books have been opened to the public. It cost the Government that year about \$260,000,000 to live. A large sum went to support the army and navy; over \$80,000,000 was paid in pensions; the Indian service cost over \$6,000,000; there were public buildings and light-houses to pay for; there was the District of Columbia to support; the interest on the public debt was nearly \$44,000,000; the civil list was long; foreign intercourse cost something.

The money for these things came from various sources. The duties on articles imported paid over \$219,000,000; the revenue from whiskey

and tobacco was about \$133,000,000; then we sold about \$111,000,000 worth of public lands; we had a big profit on coinage; we taxed seal skins; we sold a few old vessels; the District of Columbia paid in about \$2,600,000, and there were various other sources of income, amounting in all to nearly \$379,000,000. The sum on hand after paying the debts for that one year was a goodly one—\$119,612,116.09.

Now there is this troublesome surplus each year. What is to be done with it? Clearly something must be done. Such an immense amount cannot be kept on hand and allowed to swell from year to year. It ought to be at work circulating among the people. During the year 1888 the surplus was relieved by buying bonds which the Government had issued, and which were so worded that they could be called in. About \$120,000,000 were spent last year in that way, and from \$50,000,000 to \$60,000,000 were loaned to National banks each month. But there will not always be bonds to call in, and it is not wise to loan more than a certain sum.

Relief is sought in various ways. Some say, let us stop the import duties, let all foreign goods come in free; others go a shorter way and say, let us take off duties on certain things, as on sugar, to allow free sugar would take off about \$60,000,000. The Mills Bill of the 50th Congress proposed to lower the duties on some articles and to place others on the free list so that the income would be cut down about \$70,000,000. The bill which the Senate of the same Congress proposed in place of the Mills Bill cut down the income about the same amount. So much money is made by the Government on the sale of liquors and tobacco that many would dispose of the surplus by taking the tax off those articles.

Another class of advisors say, let us have a surplus and spend it improving the country. Senator Blair would put a big sum into the South as an educational fund; a large number propose improving the rivers and harbors on a gigantic scale; the navy is a poor excuse, and those who believe the country should be ready to grapple with the great navies of the world, demand that extra moneys should go there. Schemes for internal improvements, for ocean and lake defenses, for the opening of the West, etc., etc., are proposed. This is not the first time in the history of the country that the surplus has puzzled statesmen. In 1835-6-7 a similar condition existed. The

means employed then and the results which followed, should guide us to-day in our decisions.

In describing the condition of things at this time Mr. Edward M. Shepard says:

"The distribution of the surplus among the states by the law of 1836 was the last and in some respects the worst of the measures which aided and exaggerated the tendency to speculation. By this bill all the money above \$5,000,000 in the treasury on January 1, 1837, was to be 'deposited' with the states in four quarterly installments, commencing on that day. According to the law, the 'deposit' was but a loan to the states; but, as Clay declared, not 'a single member of either house imagined that a dollar would ever be recalled.' It was in truth a mere gift. Clay's triumphant ridicule of the opposition to this measure has already been mentioned. Webster in sounding periods declared his deep and earnest conviction of the propriety of the stupendous folly. He did not, indeed, defend the general system of making the federal government a tax-gatherer for the states. But this one distribution would, he said in his speech of May 31, 1836, 'remove that severe and almost unparalleled pressure for money which is now distressing and breaking down the industry, the enterprise, and even the courage of the commercial community.' The Whig press declared that a Congressman who could for mere party reasons vote against a measure which would bring so much money into his state, must be 'far gone into political hardness as well as depravity'; and that 'to the Republican Whig party alone are the states indebted for the benefits arising from the distribution.' William H. Seward, two years before and two years later the Whig candidate for governor of New York, said the proposal was 'noble and just.' The measure passed the Senate with six Democratic votes against it, among them the vote of Silas Wright, then probably closer than any other senator to Van Buren. Jackson yielded to the bill what in his message in December of the same year he called 'a reluctant approval.' He then gave at length very clear reasons for his reluctance, but none for his approval. He declared that 'improvident expenditure of money is the parent of profligacy,' and that no intelligent and virtuous community would consent to raise a surplus for the mere purpose of dividing it."

President Van Buren opposed the measure, saying:

"Those who look to the action of this government for specific aid to the citizen to relieve embarrassments arising from losses by revulsions in commerce and credit, lose sight of

the ends for which it was created and the powers with which it is clothed. It was established to give security to us all, in our lawful and honorable pursuits, under the lasting safeguard of the republican institutions. It was not intended to confer special favors on individuals, or any classes of them; to create systems of agriculture, manufactures, or trade; or to engage in them, either separately or in connection with individual citizens or organizations. . . . All communities are apt to look to government for too much. . . . We are prone to do so especially at periods of sudden embarrassment and distress. . . . The less government interferes with private pursuits, the better for the general prosperity. It is not its legitimate object to make men rich, or to repair by direct grants of money or legislation in favor of particular pursuits, losses not incurred in the public service. . . . Congress and I myself act for a people to whom the truth, however unpromising, can always be spoken with safety, and who are sure never to desert a public functionary honestly laboring for the public good."

Of the effect of the first distribution Mr. Shepard says:

"The distribution of the treasury surplus to the states precipitated the crash [panic of 1837]. The first quarter's payment of \$9,367,000 was made on January 1, 1837. There was disturbance in taking this large sum of money from the deposit banks. Loans had to be called in, and the accommodation to business men lessened for the time. There was speculative disturbance in the receipt of the moneys by the state depositories. There was apprehension for the next payment on April 1, which was accomplished with still greater disturbance, and after the crisis had begun. The calls for gold and silver, begun under the specie circular, and the disturbances caused by these distributions, were increased by financial pressure in England, whose money aids to America were but partly shown by the shipments of gold and silver already mentioned."

So direful were the consequences of the distribution of the deposits that the fourth installment was postponed by Van Buren's advice. "On October 1, Webster and Clay led the seventeen senators who insisted upon the folly of the national treasury in its destitution playing the magnificent donor, and further debauching the states with streams of pretended wealth. Twenty-eight senators voted for the bill; and in the house it was carried by 118 to 105, John Quincy Adams heading the negative vote."

One of the foremost opposers of the plan of distributing the surplus to the states was Thomas

Hart Benton. In writing of him Mr. Theodore Roosevelt says :

"There were gold mines in the Southern States which had been growing more and more productive; and, as the cost of freighting the bullion was excessive, a bill was introduced to establish branch mints at New Orleans and in the gold regions of Georgia and North Carolina. Benton advocated this strongly, as a constitutional right to the South and West, and as greatly in the interest of those two sections; and also as being another move in favor of a hard money currency as opposed to one of paper. There was strong opposition to the bill; many of the Whigs having been carried so far by their heated devotion to the United States Bank in its quarrel that they had become paper money men. But the vote was neither sectional nor partisan in its character. Clay led the opposition, while Webster supported Benton.

"Before this time propositions to distribute among the states the revenue from the public lands had become common; and they were succeeded by propositions to distribute the lands themselves, and by others to distribute all the surplus revenue. Calhoun finally introduced an amendment to the constitution to enable the surplus in the treasury during the next eight years to be distributed among the various states; the estimate being that for the time mentioned there would be about nine millions surplus annually. Benton attacked the proposal very ably, showing the viciousness of the scheme which would degrade every state government into the position of a mendicant, and would allow money to be collected from the citizens with one hand in order to be given back to them with the other; and also denying that the surplus would reach anything like the dimensions indicated. He ridiculed the idea of making a constitutional amendment to cover so short a period of time; and stated that he would greatly prefer to see the price paid for public lands by incoming settlers reduced, and what surplus there was, expended on strengthening the defenses of the United States against foreign powers. . . .

. . . "In the controversy over the bill introduced by Clay, to distribute the revenue derived from the public lands among the states for the next five years, Benton showed to great advantage compared both to the introducer of the bill himself, and to Webster, his supporter. He had all along taken the view of the land question that would be natural to a far-seeing Western statesman desirous of encouraging immigration. He wished the public lands to be sold in small parcels to actual set-

tlers, at prices that would allow any poor man who was thrifty to take up a claim. He had already introduced a bill to sell them at graduated prices, and the minimum being established at a dollar and twenty-five cents an acre; but if land remained unsold at this rate for three years it was then to be sold for what it would bring in the market. This bill passed the Senate, but failed in the House."

"In opposing Clay's distribution scheme, Benton again brought forward his plan of using the surplus to provide for the national defenses; and in his speech showed the strongly national turn of his mind, saying: "

"In this great system of national defense the whole union is equally interested; for the country in all that concerns its defenses is but a unit, and every section is interested in the defense of every other section, and every individual citizen is interested in the defense of the whole population. It is in vain to say that the navy is on the sea, and the fortifications on the sea-board, and that the citizens in the interior states, or in the valley of the Mississippi have no interest in these remote defenses. Such an idea is mistaken and delusive; the inhabitant of Indiana or Missouri has a direct interest in keeping open the mouths of the rivers, defending the sea-port towns, and preserving a naval force that will protect the produce of his labor in crossing the ocean and arriving safely in foreign markets."

"Benton's patriotism always included the whole country in spite of the strength of his local sympathies."

"He showed that to the states themselves the moneys distributed would either be useless, or else—and much more probably—they would be fruitful sources of corruption and political debauchery. He was quite right. It would have been very much better to have destroyed the surplus than to have distributed it as was actually done. None of the states gained any real benefit by the transaction; most were seriously harmed. At the best the money was squandered in the rage for public improvements that then possessed the whole people; often it was stolen outright, or never accounted for. In the one case it was an incentive to extravagance; in the other, it was a corruption fund. Yet the popular feeling was strongly in favor of the measure at the time, and Benton was almost the only public man of note who dared to resist it. On this occasion, as in the closing act of the struggle with the Nullifiers, he showed more backbone than did his great chief, for Jackson signed the bill, although criticising it most forcibly and pungently."

FRANCE ONE HUNDRED YEARS AGO.

The mind of the whole civilized world has been largely occupied the present year in thinking on France—not the France of to-day, but that of one hundred years ago. The condition of things at that time was such as to lead inevitably to a revolution. There was general poverty.

Taine says: "A famine, which, being constant, lasting for ten years, and aggravated by the very disturbances which it excites, bids fair to inflame the popular passions to madness, and change the whole course of the Revolution into a series of spasmodic stumbles. In 1788, a year of severe drought, the crops had been poor; in addition to this, on the eve of the harvest, a terrible hail storm burst over the region around Paris, from Normandy to Champagne, devastating over sixty leagues of most fertile territory, and causing damage to the amount of one hundred million francs. Winter came on, the severest that had been since 1709. After the spring of 1789 the famine spread everywhere, and it increased from month to month like a rising flood."

Arthur Young who was traveling through France declares, "Every baker shop was surrounded by a crowd, to which bread was distributed with a most grudging economy. This bread was generally blackish, earthy, and bitter, producing inflammation of the throat and stomach. I have seen flour of detestable quality at the military school and other depots. I have seen portions of it yellow in color, with an offensive smell; some forming blocks so hard that they had to be broken into fragments by repeated blows of a hatchet. As for the people, to get bread fit for dogs, they must stand in line for hours,—and here they fight for it. They snatch food from one another. There is no more work to be obtained; the work rooms are deserted. Often, after waiting a whole day, the workman returns home empty-handed, and when he does bring back a four pound loaf it cost him three francs, twelve sous, that is twelve sous for the bread, and three francs for the lost day."

The system of taxation was such as to prevent the poor from ever getting ahead. Edward Everett Hale writes: "To modern students, indeed, it seems as if no ingenuity of man or devil could have devised worse means of gathering the revenues of a great nation. System there was none. For purposes of taxation the kingdom was really three kingdoms, administered under different methods, by different bureaux. An imaginary line might separate the farms of two peasants who paid their taxes in entirely different ways, as if they had been subjects

of two crowns. The only resemblance was, that in each case the last sou was squeezed out of each tax-payer. The money thus collected dribbled into the royal treasury by the most clumsy and leaky system of conduits. There were losses, honest and dishonest, at every turn. Worst of all, probably, for social and moral effects, was the system of collecting revenue by the farmers-general, who handled almost all the money paid. They contracted to make a particular tax pay so much to the crown. Of course such men never lose anything. If, by any chance, the taxes do not yield the amount needed, the crown has simply a bankrupt to turn to. On the other hand a prosperous year and an enlargement of receipts are of no advantage to the royal treasury. The crown must lose and cannot gain under such contracts. There is no wonder, that, in all countries where this system of 'farming the revenue' had been in force, the tax-gatherer or the 'publican' has been as unpopular as he was in Palestine in the Saviour's time, or in France one hundred years ago."

Gouverneur Morris was in Paris at this time, and the following extracts from his "Diary and Letters" show what he thought of the social life of the times: "Pleasure is the great business; everybody has his country seat, and comes to town to do business once in three or four days, and then works not to finish but to get rid of work, that he may again go out of town, making business dealings with them extremely uncertain."

"Everything is *à l'anglaise*, and the desire to imitate the English prevails alike in the cut of the coat, and the form of a constitution."

"A man in Paris lives in a sort of a whirlwind which turns him around so fast that he can see nothing, and as all men and things are in the same vertiginous situation you can neither fix yourself nor your object for regular examination. Hence the people of this metropolis are under the necessity of pronouncing their definitive judgment from the first glance; and being thus habituated to shoot flying, they have what the sportsmen call a quick sight. They know a wit by his snuff-box, a man of taste by his bow, and a statesman by the cut of his coat. It is true that like other sportsmen they sometimes miss, but like other sportsmen they have a thousand excuses besides the want of skill. The fault, you know, may be in the dog or the bird or the powder or the flint, or even the gun, without mentioning the gunner."

"The Court is extremely feeble, and the manners are so extremely corrupt that they cannot succeed if there be any consistent opposition.

Unless the whole nation be equally depraved, the probability, I think, is that an attempt to retreat at this late period of the business will bring the Court into absolute contempt."

"Everybody agrees that there is an utter prostration of morals—but this general position can never convey to the American mind the degree of depravity. It is not by any figure of rhetoric, or force of language, that the idea can be communicated. An hundred anecdotes and an hundred thousand examples are required to show the extreme rottenness of every member. There are men and women who are greatly and eminently virtuous. I have the pleasure to number many in my own acquaintance, but they stand forward from a background deeply and darkly shaded. It is, however, from such crumbling matter that the great edifice of freedom is to be erected here. Perhaps, like the stratum of rock which is spread under the whole surface of their country, it may harden when exposed to the air, but it seems quite as likely that it will fall and crush the builders. I own to you that I am not without such apprehensions, for there is one fatal principle which pervades all ranks. It is a perfect indifference to the violation of all engagements. Inconstancy is so mingled in the blood, marrow, and every essence of this people, that when a man of high rank and importance laughs to-day at what he seriously asserted yesterday, it is considered as in the natural order of things. Consistency is the phenomenon. Judge then what would be the value of an association should such a thing be proposed, and even adopted. The great mass of the people have no religion but their priests, no law but their superiors, no morals but their interests."

Nor were the clergy any help to the country. Mr. Bayard Tuckerman tells their standing: "The higher ranks of the clergy were nobles by birth, and shared the habits of their class. They absorbed in their enormous incomes the greater part of the revenues of the Church. Despising the ordinary priests, they were hated in turn. The country priest lived as miserably as the peasant in his charge, and like him, could not always avoid starvation. The bishop, in his palace, led a purely secular life. He differed from the lay noble in no respect save that of marriage. His expenditure was not less lavish nor his morals less loose. He, too, paid great sums for services which he did not perform, and the sight of his idle luxury and open profligacy did more to bring about the destruction of religion than any atheistical writings. The *salons* of Paris were filled with the dissolute *abbés* who made no pretense of any religious be-

lief, and never thought of their position in the Church except as a source of income."

These evils were exposed to a scathing spirit of inquiry; of the power of which, Duruy says: "There had never been so earnest a desire for information of all sorts, or such boldness in venturing beyond the beaten tracks, as was exhibited in this century. Men had long consoled themselves for abuses by an epigram, and for crimes by a song. But now the public mind was becoming more serious, and consequently more formidable. In the presence of a royalty which took pleasure in degrading itself, of 'nobles who seemed to be only the ghost of their ancestors,' and were unable any longer to produce generals, of a clergy among whom were no longer found Bossuets or Fénelons, privileges were questioned, the title of those powers formerly respected were investigated."

And he further adds: "All this mental work had succeeded in creating in France a new power,—public opinion, to whose influence the government began to be subjected. It was desired that the administration should no longer be a frightful labyrinth in which the wisest were bewildered; that the public finances should cease to be given over to plunder; that each person should have some security for his personal liberty and fortune; that the criminal code should be less bloody and the civil code more equitable. Religious toleration was demanded; and law founded on principles of natural and rational right; and the unity of weights and measures; and taxation payable by all; and emancipation from labor and free admissibility to public offices; the most active solicitude for all popular interests; in a word, equality in the presence of the law, and liberty regulated by right."

"These demands were so earnest, so general, that the necessity of acceding to them was plain to all intelligent minds. Never did a terrible movement have more prophets to sound the alarm. At home and abroad the same opinion was expressed; by Lord Chesterfield on the one hand, and by Kant on the other. 'All the signs I have ever encountered in history as forerunners of great revolutions,' said the former, 'at present exist in France, and are every day increasing.'"

WATERSPOUTS.

The constant occurrence of whirlwinds, waterspouts, and dust storms gives to all theories of their cause a lively interest. According to the best authorities these storms are essentially the same in origin. Take the waterspout as an example. Professor Balfour Stewart says:

"A black cloud covers the sky, from which a projection is let down in the form of an inverted cone which continues to increase and extend downwards. The sea immediately beneath is soon thrown into violent agitation, showing that the whirling movement which began in the clouds has extended to the sea, and is doubtless continuous throughout, though that portion of the column is not yet made apparent, by the condensation of its contained vapor into cloud. As the whirling movement of the column becomes more intensely developed, the increased rapidity of the gyrations brings about rarefaction of the air within, with the inevitable result of increased condensation of the vapor into cloud downwards. The protrusion of the cloud and its extension downwards are thus not due to the descent of vapor from the clouds, but to the visible condensation of the vapor of the spirally ascending air currents arising from an increasing rarefaction, due solely to the accelerated rate of the gyrations, the condensation being analogous to that of the cloud seen in exhausting an air-pump.

"The surface of the sea is seen to be more or less heaped up, as well as in violent agitation, showing that atmospheric pressure immediately under the gyrating columns is less than it is all round. On land, when the tornado passes directly over a dwelling house or other closed building, it often happens that the whole building, walls and roof, is thrown outward with great violence, the wreckage presenting the appearance of a sudden explosion, proving that atmospheric pressure outside the building was instantaneously and largely reduced, and the building shattered to fragments by the expansion of the air within. It is in this way that the tornado does some of its most dreadful work.

Mr. Ferrel speaks of the waterspout as follows: "A waterspout is simply the cloud brought down to the earth's surface by the rapid gyratory motion of the tornado. As Espy with a few strokes of the handle of an air-pump produced a cloud in the receiver, from the expansion and cooling of the moist air within, so nature, by means of a whirl in the open atmosphere, produces a cloud in the vortex of a tornado, from the expansion and cooling of the air there, on account of the partial vacuum caused by the centrifugal force of the gyrations.

"Waterspouts at sea are usually more regular and better defined than those on land, and the whole area of tornadic disturbance is generally smaller, so that the spouts may be approached with safety within a very short distance, and it is only the larger and more violent ones that seriously injure a ship running into them. The destructive gyratory winds, even in the larger

ones, extend only a short distance from the center, and at distances a little greater, scarcely a breeze sometimes is experienced. The reason of this is, that the surface of the sea being smoother than that of the land, there is a more nearly perfect development of the gyrations, and a greater concentration of energy in the center of the vortex, although the whole amount of energy is generally smaller on the sea than on land, since this arises from the unstable state, which is more liable to occur, and to a greater degree of instability, on land, where the surface of the earth becomes much warmer than that of the ocean. The whole disturbance, however, is simply a tornado,—it may be a very small one, with the phenomenon of the waterspout developed in the same way as in the tornado on land.

"It was formerly supposed that the spout consisted of water drawn up into the clouds from the sea, and that the real waterspout was found on seas and lakes only, and hence the name. It is true that a considerable amount of water may be drawn from the sea, but this is merely an incidental and secondary matter and has nothing to do with the formation of the spout. The amount of water drawn up is so small generally in comparison with the amount of rainfall, that the latter is never observed to be sensibly affected by it at sea, but always appears to consist of fresh water."

Mr. James Froude when on his recent trip to the West Indies witnessed one of these storms which he thus describes: "One morning there was a tropical rain storm which was worth seeing. We had a strong awning over the quarter-deck, so I could stand and watch it. An ink-black cloud came suddenly up from the north which seemed to hang into the sea, the surface of the water below being violently agitated. According to popular belief, the cloud on these occasions is drawing up water which it afterwards discharges. Were this so, the water discharged would be salt, which it never is. The cause of the agitation is a cyclonic rotation of air or local whirlwind. The most noticeable feature was the blackness of the cloud itself. It became so dark that it would have been difficult to read any ordinary print. The rain, when it burst, fell not in drops but in torrents. The deck was flooded, and the scuttle holes ran like jets from a pump. The awning was ceasing to be a shelter, for the water was driven bodily through it; but the downpour passed off as suddenly as it had risen. There was no lightning and no wind. The sea under our side was glassy smooth, and was dashed into millions of holes by the plunging of the rain pellets."

In explaining the structure of waterspouts, Dr. Reye maintains that "in this case we have in the interior of the spout a vertical current of air carrying up the warm and moist air, while from above may possibly flow downward colder air. The suddenness with which the waterspouts are formed in a quiet atmosphere suggests that they must be preceded by an unstable equilibrium of the air, and that, by means of this, a powerful interchange of the strata of air must take place, by which at once the stable equilibrium is

brought about. The question under what condition of temperature quiet air can exist in stable equilibrium, Reye answers by a computation, showing that this takes place when the temperature of the air decreases by one degree Centigrade or more for every one hundred meters of elevation. He also demonstrates that moist air rises in the atmosphere much more easily than dry air, since the former rises when the diminution of temperature for one hundred meters amounts to one-third of a degree Centigrade."

TALK ABOUT BOOKS.

Studies in Science.

A work at once of great value to scientists and of great interest to those not versed in scientific lore is "The Ice Age in North America."* Dr. Wright, by virtue of his long and thorough study of geology, and of the special opportunities enjoyed by him as assistant in the United States Geological Surveys, has made himself a high authority on the subject of which he writes; while his calling—that of teaching—has fitted him to discuss difficult and technical subjects in direct and simple terms. In his opening chapter he explains the physical characteristics of ice and clearly defines the technical terms used in glacial study. Thus launched, the general reader finds himself quite well prepared to follow the explorer in his investigations. He gives a brief description of the few minor glaciers on the Pacific Coast; more carefully details his own observations made in 1886 on the Muir glacier in Alaska; and passes in review the existing glaciers in Greenland and other parts of the world. He then enters upon the scientific study of the great glacial field of North America. Among the plainly marked evidences left by the ice age, Dr. Wright finds none more conclusive in their testimony than the marginal deposits forming the southern boundary and marking the successive stages in the recession of the ice. The character of the drift and the striation of rocks while in process of transportation are accurately described and are made more vivid by numerous fine illustrations. As to the causes of this age Dr. Wright frankly and wisely says, after presenting in a condensed, but clear form, the various theories advanced by leading scientists: "The sum of the whole matter . . . seems to be that as yet we do not know what was the

ultimate cause of the glacial period." The interest of the book culminates in the revelations connecting man with this age of the world. The author rejects as entirely uncalled for the demand of many geologists for millions of years to express the antiquity of man in accordance with the phenomena presented. While showing that the more recent data allow this antiquity to be shortened by long ages, he makes no attempt to reconcile the discrepancy still existing between his own estimate and the Bible chronology of the creation of the human race. As a devout Christian no less than a devoted scientist he expresses himself as ready to welcome truth from whatever source it comes. When our knowledge shall become more complete he thinks all contradictions will disappear.

A successful attempt to develop the science of the winds, as far as known, is made in "A Popular Treatise of the Winds."* The word "popular" must not lead those who are looking for information on the subject to the belief that the work is so simple that it may be read without work. This was not the author's plan; but rather the simplification of the physical laws and mathematical demonstrations so far as consistent with giving really scientific proofs for the conclusions of meteorologists and sound reasons for the theories on which weather predictions are based. It is safe to say that the minimum of effort consistent with a decent understanding of the subject is called for. Mr. Ferrel has been connected for a long time with the signal service, and the book is an outcome of his labors there. It is the only popular and complete work on the subject accessible to English students.

*The Ice Age in North America. By G. Frederick Wright, D.D., LL.D. New York: D. Appleton and Company. Price, \$5.00.

*A Popular Treatise on the Winds. By William Ferrel, M.A., Ph.D. New York: John Wiley & Sons. 1889. Price, \$4.00.

The beginner in French History is well started who takes up Duruy's *Short History*.* A short history is not as a rule a high order of a book. The disjointed historical impressions received from defective short histories in school-days still torment many of us and make us beware of the genus. But the immature judgments, the omission of causes, the dry and bony character which haunts us in them, have been escaped by Duruy. His thread is never broken, knotted, or tangled. It reels through the mind swift and smooth, and leaves the strong, complete, compact impression so desirable in attempting to thoroughly understand a country's life. The author is a Catholic but not a bigot and while he gives the church its due he recognizes the abuses; a fact which brought on him bitter persecution when he held the position of Minister of Instruction. In putting the work into English, the translator, Mrs. Carey, has been obliged by the publisher's wish to make but one volume, to abridge the original. Her work has been carefully done. A continuation of the history from 1870, where Duruy's appendix closes, to 1889, by Prof. Jameson of Brown University, adds to the practical character of the work. The many maps of the original (the wood cuts in that are omitted) are retained, and still further recommend the work to those unfamiliar with the subject. To one who wants to begin to study France we feel no hesitation in saying, begin with Duruy.—It is misleading to give the title of history to a work of the nature of Mrs. Farmer's "*Short History of the French Revolution*."† Glimpses, pictures, extracts, would be appropriate but not history. From Michelet, Lamartine, Thiers, Mignet, Taine, Arthur Young, Carlyle, Louis Blanc, and others, the compiler has gathered forcible paragraphs on certain features of the great period. These she has connected sufficiently to give it the semblance of a whole though not the reality. Perforce, extracts from these authors must be long; the result is that so much space is given to picturesque features and pivotal situations that the effect is spotted, not continued as the title promises it shall be. As a book of extracts, however, to be used with a good history, it will be found entertaining and useful. The chronological table of the Revolution is a convenience.

* *A History of France*. By Victor Duruy. Abridged and translated from the 17th French edition by Mrs. M. Carey. New York: Thomas Y. Crowell & Co. 1889. Cloth, \$2.00.

† *A Short History of the French Revolution*. For Young People. By Lydia Hoyt Farmer. New York: Thomas Y. Crowell & Co. Price, \$1.50.

Benjamin Franklin.

Never could the well-worn saying, "There is always room at the top," be more aptly applied than to the biography of Franklin written by Mr. Morse. The author's fears that another volume added to the long list already devoted to that great American could find for itself no place in literature were utterly groundless; a wide place must be accorded to this able work. It possesses in a remarkable degree the power of setting the living man before the reader. At home, abroad, in domestic life, in political affairs, wherever his career is traced, the pages faithfully reflect the strong personality. There is no attempt at exaggeration; his faults are not condoned. An especially interesting chapter is that dealing with the Hutchinson letters and never has that episode been more satisfactorily explained. The whole work shows the author to be not only thoroughly versed in American history in all its details, but also possessed of good discrimination and judgment regarding difficult or doubtful questions.

Literature.

"Thick as autumnal leaves" expresses the number of works being showered upon the public under the generic term "English and American Literature."‡ The similarity of these productions is so great that it is only by reading the Preface that it can be discovered whether it is tweedledee or tweedledum—but *sometimes* it is found that the author has a good reason for its being "dum" or "dee." It would be a great relief to the book-world if these good points were all in one volume. Huntington Smith adds another to the "collection of extracts," this time it is American Literature. He says his work is to be a companion to all the histories of American Literature, for they are so limited as to space. He is to be commended that many of the selections express some distinctively American thought.—A charmingly written book is Miss Wright's "*Children's Stories in English Literature*."§ The peculiar attraction of the old British and Saxon songs, the life of good King Alfred, the romantic reign of King Arthur, the exploits of that popular hero, Robin Hood, the fame of the pattern of chivalry, Sir Philip Sidney, are retold in such simple language and engaging manner that they will fascinate young readers.—To meet

* Benjamin Franklin. By John T. Morse, Jr. In the *Series of American Statesmen*. Boston and New York: Houghton, Mifflin and Co. Price, \$1.25.

† *A Century of American Literature*. Selections from a hundred authors. Chosen and arranged by Huntington Smith. New York: Thomas Y. Crowell. Price, \$1.75.

‡ *Children's Stories in English Literature*. From Taliesin to Shakespeare. By Henrietta Christian Wright. New York: Charles Scribner's Sons. Price, \$1.25.

the needs of a student in the critical analysis of the tragedy of "Macbeth,"* the suggestive one edited by Homer B. Sprague, A.M., Ph.D., is without equal. Copious notes, opinions of the best critics on disputed points, a map of Scotland locating important localities in the play, an elocutionary analysis, are some of the helpful points.—The finished paper, good type, and clear arrangement of matter which characterize Welsh's text-books make it a pleasure to use them; these things in a work the size of his "Development of English Literature and Language"† are especially to be appreciated. A well-defined view of this development of our language can be obtained by following closely the author's plan, which discusses the shaping forces of each period, under the heads, Politics, Society, Religion, Poetry, the Drama, the Novel, the Periodical History, Theology, Ethics, Science, Philanthropy; then each writer under the following classification, Biography, Writing, Style, Rank, Character, and Influence. The work is sympathetic, scholarly, and complete.

**Books for
Bible Students.**

Dr. Briggs has given in his book "Whither?"‡ the results of twenty years' close study of the history of theology. Deploping the spirit of restlessness and the worse manifestation of indifference, which at the present time are so manifest in orthodox churches, he enters into an examination of the causes of this drifting away from the right spirit of Christianity, and finds them to be erroneous ideas respecting the true doctrines of the Bible. Nowhere have we seen a finer distinction than that he makes between orthodoxy—right thinking about the Christian religion—and orthodoxism—an assumption of the knowledge of all truth and an unwillingness to learn. He sees as the greatest danger now threatening the Christian church at large, the fatal opposition to the progress of doctrines. The greater part of the work pertains directly to Presbyterianism, using the old Westminster Standards as the test of orthodoxy for that denomination, but claiming that they must be revised to suit the advanced thought of the present. The book is catholic in spirit, and in a broad, clear way treats of questions of vital interest to all Christian churches.—Two little volumes doing valiant service for the cause of the Chris-

tian religion are each composed of a series of lectures delivered before the students of the Ohio Wesleyan University. Christian education* forms the theme of the first volume, and in it Dr. Curry shows the character and capabilities of such education and the need of intelligent conceptions in regard to the Scriptures in order that true faith may be maintained and Christian character upbuilt.—The second book tends to establish the foundations upon which the true faith rests.† Under the plain and logical directions of Dr. McCosh, the sophistry often brought to bear especially against the Christian belief is pointed out, the confusion and difficulties often attaching to it lessen or disappear, and the truth is made to reveal itself. For a guide through the intricate mazes of metaphysics into which he enters for his "tests," no better than Dr. McCosh can be found.—In searching out the obscure history of the Hittites of the Bible, Dr. Fradenburgh has succeeded in making an interesting book. The tact which led him to choose so happy a title as "Old Heroes"‡ has served him in popularizing and making attractive what might in other hands have proved a heavy work. The results of his researches are such as to settle the questions raised by some scholars as to the accuracy of the Bible statements regarding this people, all the records found corroborating those statements.—"The Gospel of Common Sense"§ is a study of the Epistle of James. This one book is taken out of the library composing the Bible, and is discussed as an independent work. Its author, its times, its motive, its scope, all the points upon which a clear-seeing interpreter fastens his attention, are ably passed in review. A close study is made of the text; and forcible lessons are drawn from its teachings, though the treatment is very different from that of a commentary or of a volume of sermons. Dr. Deems is a man of strong convictions, and outspoken in their expression, which imparts a keen interest to his writings. He strikes straight at the root thought of the inspired writer, and presents it simply, forcibly, and attractively to the reader. He has discovered the true method of the most effective Bible study, and it is to be hoped that the system will soon be applied to all the sacred books.

* Christian Education. By Rev. Daniel Curry, LL.D.

† The Tests of the Various Kinds of Truth. By James McCosh, D.D., LL.D., D. L. New York: Hunt & Eaton. Cincinnati: Cranston & Stowe. Price of each, 70 cts.

‡ Old Heroes. By Rev. J. N. Fradenburgh, Ph.D., D.D. New York: Hunt & Eaton. Cincinnati: Cranston & Stowe. Price, 75 cents.

§ The Gospel of Common Sense. By Charles F. Deems, D.D., LL.D. New York: Wilbur B. Ketcham. Price, \$1.50.

* Shakespeare's Tragedy of Macbeth. Edited with notes by Homer B. Sprague, A.M., Ph.D. Chicago: S. R. Winchell & Co. Price, cloth, 50 cts.

† Development of English Literature and Language. By Alfred H. Welsh, A.M. 2 Vols. Chicago: S. C. Griggs and Company.

‡ Whither? By Charles Augustus Briggs, D.D. New York: Charles Scribner's Sons. Price, \$1.75.

—"The Church School and Normal Guide" is a work to be adopted as a standard by Sunday-school teachers. Dr. Vincent is so well-known as a specialist in this department of work as to render all comment unnecessary; his book embodies the lessons gathered from years of experience. He "knows whereof he speaks," and his words are plain, practical, enthusiastic. In the wide general survey first presented, he traces the growth and development of the work from its earliest history in the Old Testament times down to the present. The second part of the book, devoted to the Normal studies, contains the specific lessons needed by every teacher concerning *what* and *how* he is to teach.

The first English translation of Dante's "Il Convito"† appears in the forty-ninth volume of Morley's Universal Library. The convito, or banquet, is "a feast of dishes of knowledge for the mind and heavenward aspiration for the soul." It furnishes an opportunity of viewing the forms of reasoning which made the science of Dante's time, and the ingenious but false theories that then prevailed. It is pervaded by the same intensity and seriousness that characterize this poet's master-pieces. The translator enters heartily into the spirit of the author and her English rendering is beautifully clear and smooth.—"When the heart of the reader beats in sympathy with the heart of the writer, both the sense and beauty of the work become apparent," says the editor of "Selections from Wordsworth."‡ It is such a sympathy that he has brought to his task of widening the avenues to the study of his favorite poet. His notes are numerous and helpful. A syllabus for use in classes accompanies the volume.—Another help to study, commendable in both plan and execution, is the "Prolegomena,"|| which aims to clear away the obscurities of "In Memoriam," to state its problems, and present the poet's solution of them. Numerous parallel passages are introduced from other writers and a complete index to the poem is added.—An admirable "Introduction to Browning"¶ has been prepared by Prof. Alex-

ander of Dalhousie College. It consists of a large number of extracts from the poems, with thoughtful analyses and keen critical comments. It will meet the wants of students bent on understanding and appreciating this confessedly difficult and enigmatical author.—The choicest translations of the epigrams of "Greek Anthology"*** have been collected in a charming little volume by the poet Graham R. Tomson. Among the translators most frequently represented are Andrew Lang and Richard Garnet, the quality of whose work is above criticism.

Some Recent Fiction. The last two books by Robert Louis Stevenson present a strong contrast of mood. In both "The

Wrong Box"† and "The Master of Ballantrae"‡ the plot is unique and the grasp on the characters firm, but the former bubbles over with fun, the latter devotes itself to subtle and sympathetic observation of the workings of the human heart; the former sustains, throughout, its reckless, rollicking humor, the latter never abandons its nervous, grave intensity. Few will be found to dispute the statement that "The Master of Ballantrae" is the best book yet produced by this author.—"Cyril"|| is a piece of vigorous writing, evidently the work of an independent thinker and a man who has studied much and traveled widely. He often stops the movement of the story for wayside comments on politics, literature, society, and the mission and destiny of England, yet the interest does not flag. The purpose of the book plainly is to plead for the author's church and country, and it is done earnestly and eloquently.—Barton Lee is the pseudonym of the Rev. Mr. Lewis, an Episcopal rector, the author of "Thomas Hard, Priest."‡ The story of five short chapters is an allegory full of beauty, teaching that the mistakes of the past may be so used as to ennoble the present, and that patient gentleness is an invincible power.—The magazine story "Fishin' Jimmy"¶ has been reprinted in a book of some fifty pages, on heavy calendered paper, and with a number of illustrations. It will make a pretty gift book for those who are fond of that class of hysterical

*The Church School and the Sunday-school Normal Guide. By John H. Vincent. New York: Hunt & Eaton. Cincinnati: Cranston & Stowe. Price, \$1.00.

†The Banquet. Translated by Elizabeth Price Sayer. With an Introduction by Henry Morley. London and New York: George Routledge and Sons.

‡Selections from Wordsworth. With Notes by A. J. George, M. A. Boston: D. C. Heath and Co.

||Prolegomena to In Memoriam. By Thomas Davidson. Boston and New York: Houghton, Mifflin and Co. Price, \$1.25.

¶Introduction to the Poetry of Robert Browning. By William John Alexander, Ph.D. Boston: Gian and Co.

*Selections from the Greek Anthology. Edited by Graham R. Tomson. New York: W. J. Gage and Co. Price, 40c.

†The Wrong Box. By Robert Louis Stevenson and Lloyd Osborne. Price, \$1.00. ‡The Master of Ballantrae. By Robert Louis Stevenson. Price, \$1.25. New York: Charles Scribner's Sons.

||Cyril. A Romantic Novel. By Geoffrey Drage. London: W. H. Allen and Co.

‡Thomas Hard, Priest. By Barton Lee. New York: Anson D. F. Randolph & Co. Price, 50c.

¶Fishin' Jimmy. By Annie Trumbull Slosson. New York: D. F. Randolph and Co. Price, 60c.

literature.—The author of "Gold that did not Glitter"* has a very fetching style, bright, merry, piquant. The plot is an airy nothing and the dénouement is evident from the first, yet even the jaded novel reader will smile over the book, and remember it for a brief time, perhaps.—The scenes of "Andersonville Violets"† are laid in both North and South during the years of the Civil War. It is a spirited story, unmarred by partisan feeling.

*Gold that did not Glitter. By Virginus Dabney. Philadelphia: J. B. Lippincott Co. Price, \$1.00.

†Andersonville Violets. By Herbert W. Collingwood. Boston: Lee and Shepard. Price, \$1.00.

Miscellaneous. That practical magazine, *The Art Amateur*, (Montague Marks, New York City) announces many attractions for its current volume. Nearly every branch of decorative work receives attention in its pages, and the original designs for copying, with full directions for treatment, are just what are needed by amateurs. The text reports the latest art news, gives descriptions and criticisms of current exhibitions, biographies of artists, answers to correspondents, in short, is a necessity to those who wish to keep up with the times in the various departments of art and to secure a trustworthy art guide.

SUMMARY OF IMPORTANT NEWS FOR SEPTEMBER, 1889.

HOME NEWS.—September 2. Wide observance of Labor Day.

September 3. Yarmouth, Mass., celebrates its 250th anniversary.—The National Bankruptcy Convention begins its session at Minneapolis.

September 4. The Helena, Montana, assay office turns out the largest bar of gold ever cast in the world; its weight is 500 pounds.

September 5. Celebration of the founding of the Old Log College, the cradle of American Presbyterianism.—Ex-President Legitime of Hayti arrives in New York City.

September 8. The 250th anniversary of the founding of Guilford, Conn., is celebrated.

September 8. Much damage is done to the pleasure resorts on New York Bay by a tidal wave.

September 9. California commemorates the 39th anniversary of its admission into the Union.—A six days' demonstration begins in Baltimore to honor the anniversary of the defense of Baltimore against the British in the War of 1812.

September 10. The Atlantic coast is swept by a hurricane.—Death of the Hon. S. S. Cox.

September 11. National Conference of Charities in session Sat an Francisco.

September 14. End of the strike in the Connellsville coal region, the demands being granted to 4,500 men.—A bronze statue of General Grant is unveiled at Fort Leavenworth, Kan.

September 15. A fire in Louisville, Ky., causes a loss of nearly \$1,000,000.

September 20. The Chickamauga Memorial Association is organized by survivors of the Northern and Southern armies at the Chickamauga battle field.

September 25. Five persons killed and several injured on the Chicago, Rock Island and Pacific Railroad by a collision near Chicago.—

Reunion of the Army of the Tennessee in Cincinnati.

September 28. Five persons killed in an accident on the New York Central R. R., at Palatine Bridge, N. Y.

FOREIGN NEWS.—September 2. King Oscar of Sweden opens the Congress of Orientalists assembled at Stockholm.—The Anti-Alcohol Congress in session at Paris.

September 5. Sixty miners lose their lives in a colliery explosion in Scotland.

September 6. An explosion in a cartridge factory at Antwerp kills nearly 200 people and injures over 500.—Mr. Gladstone visits the French Exposition

September 10. The University of Edinburgh confers the degree of LL.D. on M. Pasteur.

September 11. Bi-metallic Congress in session at Paris.

September 15. Unveiling in Paris of a monument to the French soldiers and sailors who fell in the Franco-Prussian War.

September 17. Opening of the Dutch Parliament and the Mexican Congress.

September 19. An avalanche of rocks in Quebec crushes a number of houses and kills twenty-five people.

September 21. A monument to the French Republic is unveiled in Paris by President Carnot.

September 23. Death of Wilkie Collins.

September 27. At Paris the Grand Cross of Commander of the Legion of Honor is bestowed upon Thomas A. Edison.

September 28. Disastrous floods in Mexico.

September 30. Two express trains collide near Naples, Italy, telescoping twenty cars; the killed and injured number fifty.